



THE CULTURE OF

Animals in Antiquity

A SOURCEBOOK WITH
COMMENTARIES

SIAN LEWIS AND
LLOYD LLEWELLYN-JONES

VISIT...

LANZAROTE
Caliente.COM

THE CULTURE OF ANIMALS IN ANTIQUITY

A Sourcebook with Commentaries

‘Llewellyn-Jones and Lewis have produced an ambitious and thought-provoking work which will be essential reading for all those wishing to inform themselves about the roles and functions of animals in the ancient Mediterranean world.’

– Julia Kindt, The University of Sydney, Australia

‘This volume testifies to the fact that animals have become one of the core themes in research on Graeco-Roman antiquity. It gives easy access to a plethora of important sources (ranging from 3000 BCE to 600 CE) and illustrates the numerous ways in which animals were reflected on in the ancient world. The documents covered here (written texts in translation, material remains and art) provide useful evidence on eighty-four different species, including mammals, reptiles, birds, insects, crustaceans and molluscs. One of the many virtues of this substantial book is that it transcends the traditional temporal and geographical boundaries of studies on the ancient world. Readers will find it an instructive treasure trove of information.’

– Thorsten Fögen, Durham University, UK

The Culture of Animals in Antiquity provides students and researchers with well-chosen and clearly presented ancient sources in translation, some well-known, others undoubtedly unfamiliar, but all central to a key area of study in ancient history: the part played by animals in the cultures of the ancient Mediterranean. It brings new ideas to bear on the wealth of evidence – literary, historical and archaeological – which we possess for the experiences and roles of animals in the ancient world.

Offering a broad picture of ancient cultures in the Mediterranean as part of a wider ecosystem, the volume is on an ambitious scale. It covers a broad span of time, from the sacred animals of dynastic Egypt to the imagery of the lamb in early Christianity, and of region, from the fallow deer introduced and bred in Roman Britain to the Asiatic lioness and her cubs brought as a gift by the Elamites to the Great King of Persia. This sourcebook is essential for anyone wishing to understand the role of animals in the ancient world and support learning for one of the fastest growing disciplines in Classics.

Sian Lewis is Senior Lecturer in Ancient History at the University of St Andrews, where she teaches Greek and Roman history, historiography and art. She specialises in Greek political and social history of the classical period. Her publications include *News and Society in the Greek Polis* (1996), *Greek Tyranny* (2010) and two collections of essays, *Ancient Tyranny* (2006) and *Tyranny: New Contexts* (2016). She has also written extensively on Greek gender and iconography, including *The Athenian Woman: An Iconographic Handbook* (2002) and (as co-editor) *The World of Greek Vases* (2010). She is currently developing a project to study animal lives in the classical world.

Lloyd Llewellyn-Jones is Professor of Ancient History at Cardiff University. His research focuses on the Persian Empire, Achaemenid monarchy and the Persian court as well as Greek socio-cultural history, ancient gender and Hellenistic civilisation. He is the author of *Aphrodite's Tortoise: The Veiled Woman of Ancient Greece* (2003) and *King and Court in Ancient Persia* (2013), the co-author of *Ctesias' History of Persia: Tales of the Orient* (2010), the editor of volumes on Greek historiography, ancient dress and gender, and the co-editor of *Creating a Hellenistic World* (2010) and the forthcoming *The Hellenistic Court*. He is the Series Editor of *Edinburgh Studies in Ancient Persia*, and the Series Co-Editor of *Screening Antiquity*. He is currently co-authoring a book on Ptolemaic queens and a monograph, *Designs on the Past: How Hollywood Created the Ancient World*.

THE CULTURE OF ANIMALS IN ANTIQUITY

A Sourcebook with Commentaries

Sian Lewis and Lloyd Llewellyn-Jones

First published 2018
by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge
711 Third Avenue, New York, NY 10017

Routledge is an imprint of the Taylor & Francis Group, an informa business

© 2018 Sian Lewis and Lloyd Llewellyn-Jones

The right of Sian Lewis and Lloyd Llewellyn-Jones to be identified as authors of this work has been asserted by them in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Names: Llewellyn-Jones, Lloyd, author. | Lewis, Sian, author.

Title: The culture of animals in antiquity : a sourcebook with commentaries / Lloyd Llewellyn-Jones and Sian Lewis.

Description: Milton Park, Abingdon ; New York, NY : Routledge, 2017. |

Includes bibliographical references and index.

Identifiers: LCCN 2016053014 | ISBN 9780415817554

(hardback : alk. paper) |

ISBN 9781315201603 (ebook)

Subjects: LCSH: Animal culture—

Mediterranean Region—History—To 476. |

Human-animal relationship—History—Source. |

Animals—Social aspects—History.

Classification: LCC SF41 .L54 2017 | DDC 636.00937—dc23

LC record available at <https://lcn.loc.gov/2016053014>

ISBN: 978-0-415-81755-4 (hbk)

ISBN: 978-1-315-20160-3 (ebk)

Typeset in Bembo
by Keystroke, Neville Lodge, Tettenhall, Wolverhampton

To our cats:

Max, Sol, Siri, Dan, Tabitha, Apple, Juno, Alain and Tommy
– S.L.

To the cats and dogs in my life:

Bea, Purdy, Arthur and Jessie, Ryker, Picky, Wesley, Lacey and
Cheeky-Pussy, César-Phoebus and Iestyn, Masie, Shirin and Myfanwy
– L.L-J.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

CONTENTS

<i>Acknowledgements</i>	<i>ix</i>
Introduction	1
1. Taxonomies: making sense of animals	8
2. Domestic animals	32
a) Mammals	32
<i>ox; goat; sheep; pig; horse; donkey/mule; camel; dog; weasel; cat; human</i>	
b) Birds	230
<i>goose; duck; chicken; dove/pigeon; quail; parrot; peacock; pheasant</i>	
c) Insects	281
<i>bee</i>	
3. Wild animals	296
a) Mammals	296
<i>deer/antelope; gazelle; bear; lion; leopard; jackal; hyena; wolf; fox; badger; mole;</i> <i>hare/rabbit; hedgehog; mongoose; rat; mouse; bat; seal; dolphin; whale; aurochs; elk;</i> <i>elephant; hippopotamus; rhinoceros; giraffe; cheetah; tiger; monkey</i>	
b) Birds	473
<i>crow/raven; sparrow; nightingale; owl; falcon/hawk; eagle; vulture; crane/stork; swan;</i> <i>water birds; hoopoe; ostrich</i>	
c) Reptiles and amphibians	545
<i>crocodile; tortoise/turtle; frog/toad; lizard; snake</i>	

d) Insects and molluscs	593
<i>ant; cricket/cicada; locust; scorpion; scarab beetle; spider; fly; butterfly/moth; flea; louse; weevil; snail</i>	
e) Marine creatures	651
<i>fish; shark; octopus; crab; oyster; murex</i>	
4. Working animals	686
<i>agriculture; transport; performing animals; hunting; warfare</i>	
5. Pets	713
<i>dogs; cats; primates; other mammals; birds; reptiles and insects</i>	
6. Sport	738
<i>entertainment; animal fights; hunting</i>	
<i>Index animalium</i>	763
<i>Index of classical authors</i>	767

ACKNOWLEDGEMENTS

A book of this scale and diversity could not have been written without the help and engagement of many other scholars, and we both owe thanks to the brilliant minds and kind generosity of numerous individuals. Here we acknowledge that debt of gratitude with sincere appreciation.

L.L.-J. & S.L.

My thanks to the friends and colleagues who shared their specialist knowledge, including Rebecca Sweetman, Jon Coulston, Stephen Hodkinson, Naomi Sykes, Virginia Campbell, Emma-Jayne Graham, Nora Batterman, Robin MacKenzie, Lorenz Winkler-Horaček, Ken Kitchell, Judy Barringer, Elizabeth Moignard, Christiana Franco, Alistair Harden, Thorsten Foegen and many others.

Thanks also to Tessa Rickards, who drew the line drawings, and proved more than equal to most challenging material, and to the many colleagues who assisted with photographs and permissions: Irene Boesel and Kornelia Kressirer at the Staatliche Antikensammlungen und Glyptothek, Munich; Jean-Michel Bontempi and Francois Orlandi at the Musée d'Aléria; Katharina Brandt at the Deutsches Archäologisches Institut, Athens; Paul Butler; Iain Calderwood at the British Museum; Antony Chubb at Bromley Museum; Cameron Clegg; Sebastian Encina and Michelle Fontenot at the Kelsey Museum; Fourcroy Florence at the Musée de Boulogne-sur-mer; Don Garber; Jos Janssen; Joe Jaroch; Christine Kondoleon; Daria Lanzaolo at the Deutsches Archäologisches Institut, Rome; Steve Martin of St Andrews University Library Special Collections; Oriol Olesi Vila; Carlo Raso; Dale Serjeantson; Rebecca Sweetman; Naomi Sykes; Branko van Oppen and Stephan van der Linden at the Allard Pierson Museum; Yukie Takagaki at the Miho Museum. Amy Davis-Poynter and Elizabeth Thomasson at Taylor & Francis gave valuable assistance throughout the project. The School of Classics in St Andrews offered both generous assistance with the expense of illustrations, and the research leave which allowed me to complete the work.

I have enjoyed working on this book more than any other academic project, both because of the great pleasure of collaborating with Lloyd, who brought his characteristic enthusiasm, wide-ranging knowledge and imagination to every stage, and because of the amazing and diverse material which we discovered, which led me into some unexpected areas and expanded my academic horizons. The book would not exist without Lloyd's energy and vision.

My greatest debt, as always, is to Robin MacKenzie, who lived with the animals for a very long time and whose interest and support never flagged. This book is dedicated, as is appropriate, to our cats, past and present.

S.L.

Acknowledgements

Sincere thanks to the friends and colleagues who helped with the collecting of the diverse materials contained in this book and for always being on the lookout for new and unusual sources for me; they've kept me excited about this project over many years. Special mention goes to Sandra Bingham, always the finest and most critical sounding-board and a patient friend.

Thanks too to Amy Davis-Poynter and Elizabeth Thomasson at Routledge.

Sian Lewis has been an inspirational workmate. It was her infectious enthusiasm for exploring the animal life of the past which first captured my imagination. This book has been a joy to work on, not just because of the rich and diverse subject materials, but because of Sian's wholehearted passion for the project.

A particular type of thanks goes to my partner, David Pineau, whose abounding love of animals is a clear reflection of his good soul. I dedicate this book to the animals that share our home.

L.L.-J.

INTRODUCTION

I

Is history all about humans? History is the study of human affairs in the past, but human affairs have never been just human affairs: humans exist in a wider environment and the actions of all living entities (plants, animals, bacteria) which share that environment, and even the landscape itself, are part of that past. Today it comes easily to us to separate out the human from the animal, vegetable or microbial: in the course of the twentieth century we have hugely accelerated the process of controlling and depleting the natural world, with recent suggestions that we now inhabit an age defined by human activity, the Anthropocene (Davies 2016). Yet for most of human history (and indeed in developing cultures still) the relation between humans and the animal world was and is entirely different. In the first place, humans exerted far less control over other species. Large predators were more frightening, certainly, and could be encountered with some regularity, but more significant was the lack of control over species which competed for resources (deer, birds, locusts), exploited human agriculture (weevils, mice, sparrows) or which were parasitic. There was nothing like the chemical warfare waged against insects and rodents today (see Buckland 1991 and Smith 2012); indeed the scales were weighted so far in the opposite direction that in antiquity a catastrophic locust attack on crops could be directly compared to the devastation of war. Secondly, human populations were very small by comparison to the present and impinged little on most of the animal world. And conversely, animals were much more present in ancient cultures, not only in functional ways (although it is true that there was less distinction between the urban and rural environment, that agriculture was not kept at arm's length as it is today, and that animals were the primary means of transport); at a much broader level, ways of life were less complex and consequently animals occupied a much larger part of the human worldview.

What stands out from our sources is the attention paid to animals of all kinds: according to Mormann et al. (2011), *zootropia* (literally, a turning towards animals) is an intrinsic characteristic of humans, and the interest in and observation of animals is marked in ancient texts and images. People drew, sculpted, learned and wrote about animals as a major constituent of the world; they were dependent on the observation of animal behaviour for information about the changes of the seasons and the prediction of weather, they looked to animals to predict the future, and they found them beautiful, interesting or instructive. We should thus consider ancient societies not solely as human organisations but as rich ecological webs inhabited by many species together.

Our aim in creating this sourcebook has been to illustrate this rich zoological world. It is not simply a compendium of sources showing how humans exploited animals in ancient cultures or what they thought about animals: we have aimed rather to show how humans and animals coexisted – how humans interacted with different species, how some creatures were able to exploit and benefit from human practices, and how animals' desires and demands in turn shaped those practices. Of course in most cases (though not all) the past must be reconstructed through a prism of human experience, but we have nevertheless tried to foreground the lived experience of the animal as far as possible. Sources on eighty-four animal species are presented here, including insects, molluscs, testaceans, crustaceans, reptiles, birds and mammals. Among them is an entry on humans: it seemed important to us to include humans as a species of animal, instead of adopting the view of our exceptionality (existing 'in a state of transcendence over animality': Ingold 1994: xxi). The relationship between human and animal was a topic of debate in the cultures studied here: as today, people used animal categories as forms of verbal abuse ('dog', 'fox', 'pig' and 'flea' especially) in order to distance humans from the animal world, yet the ancient sources collected here emphasise the porous boundary between people and animals, especially in cultures where humans could be owned and kept as pets, and where the status of 'wild' or 'uncivilised' people was unclear (see further the discussion in *TAXONOMIES, HUMAN, PETS*).

The period covered by the book spans 3000 BCE to 600 CE, including the cultures of the ancient Near East and of the classical Mediterranean, and from one perspective this is a long period of history and a dizzying array of cultures: human history might argue for treating them separately. On the scale of animal history, however, this period is a very short time – far too short for any appreciable change in animal life (except where humans themselves were the agents). On a biological level the last great event in the region was the retreat of the ice sheets from Europe and the recolonisation of the region by new and returning species. Long-term changes did occur, such as the gradual disappearance of the lion and leopard from Europe and of the elephant from the Levantine coast, and the spread of animals such as the rat and rabbit, but to a mole or a vulture, four thousand years of history is not very much.

Of course this perspective raises a further question: if human history is irrelevant to a mole or a vulture, and animals now are essentially the same as animals then, does this mean that we have a method of reaching directly into the past by observing animals which are the same now as they were in Sumeria or Egypt? Among domestic animals almost certainly not, since human-induced change has created new breeds and modified behaviour (though cat lovers always comment on the similarity of cat behaviours depicted in Egyptian art to those of their own pets); among wild animals, however, there has been little or no change in appearance or behaviour, and that which has occurred has happened mostly in the last hundred years (see Rackham 1990). This means that animal behaviour in the present can be usefully used to illuminate the past: humans in Babylon or Alexandria may have reacted to a louse or a hedgehog in different ways compared to modern Westerners, but the louse or hedgehog reacted in just the same way to them as to us.

II

This book is a collection of sources, written texts, material remains and art, covering the major cultures of the Near East (Sumerian, Babylonian, Hittite, Assyrian, Levantine and Iranian), Pharaonic and Ptolemaic Egypt, Minoan and classical Greece, and the Roman empire. For each animal we have chosen sources to convey the place of the animal in the ancient world and to answer a series of questions: what did ancient cultures know about this animal? How did they encounter it and how did it respond? What happened to the animal when it interacted with

humans? At the primary level, anyone wanting to know about (say) the mouse in classical or Near Eastern society can find here a representative selection of sources on mice, their actions and human responses to them. Each source has an associated commentary and each entry a dedicated bibliography.

The sources are presented by individual species, in chapters which group them in broad categories. We did not wish to adopt either an anachronistically modern classification or the neat but unconsidered alphabetic approach. Instead, we have divided our species using broadly the same schema as the ancients: a primary distinction between domestic and wild species, followed by distinction by habitat – animals of land, sky and water, the most common modes of ancient categorisation (see *TAXONOMIES*). Insects and molluscs form a separate category, as do reptiles, distinctions which were recognised in texts as diverse as Aristotle's biological treatises and the Hebrew bible. Within these broad categories we have begun with native and familiar species and worked outwards to the exotic.

Presentation by species encourages comparison between animals occupying similar ecological niches or playing similar roles in human society, and also easy comparison between cultures, allowing us to trace the presence or absence of different animals in cultural experience. For example, the exuberant marine life of the Minoans and Greeks can be contrasted with the riverine species of the Near East, while the abundant desert species of Egypt and the East were unknown in Europe. At a more fundamental level it points up some stark differences between reactions to specific animals, to the dog and the pig most markedly, but also to animals like the bee and the snake. Attitudes towards particular species were surprisingly variable and can also confound modern expectations, as with the Egyptian dislike of the turtle, the Greek admiration for the fly or the Assyrian abhorrence of the lion.

Within each medium we have tried to introduce as great a variety of material as possible: among written texts we draw not only on more obvious sources such as the biological researches of Aristotle and the natural history of Pliny, or medical texts from Egypt or Mesopotamia, but encompass the Near Eastern and classical fable traditions, manuals of weather prognostication, oracle interpretations and other animal-*omina*, epigrams and philosophical and religious texts. We have also drawn on literary texts, believing that the behaviour of the animals depicted in hymns, proverbs, drama or poetry is not purely metaphorical but has its roots in the lived experience of the ancient world.

Art has always been considered an excellent resource for understanding ancient animals and we include imagery from public and private contexts – reliefs, wall-paintings, domestic mosaics, jewellery, metalwork and ceramics. As well as documenting the presence of, and knowledge about, individual animal species, historians have recently begun to exploit the evidence of iconography to decode the realities of animal behaviour. Leading the way in this exciting field is Evans' *Animal Behaviour in Egyptian Art* (2010), a study of a wide range of animal behaviour traits (mating, care of young, aggression, predatory behaviour, display) found in Old Kingdom wall paintings, which Evans compares with photographs of animal behaviour in the wild. The result demonstrates the careful attention paid to the nuances of animal behaviour witnessed by Egyptian artists, indicating the potential of art for reaching the lived experience of animals.

Zooarchaeological material is obviously of great significance to a source collection of this kind, though its distribution is unfortunately patchy: the examination of animal remains at excavated human sites has only been undertaken systematically since the 1970s, usually with the aim of understanding farming practices, and only in the past few decades have techniques to recover all animal remains been added to excavation practice in a consistent way. The result of this is that the archaeology of large domestic species is comparatively well explored but that of smaller animals (birds, fish, insects) has been neglected until very recently. There is thus much more that can be

said about the archaeology of animals commensal with humans, such as cattle, dogs and horses, than about wild species. Animals in funerary contexts, in contrast, have been treated in considerable depth, and studies of animal remains such as Ikram's *Divine Creatures: Animal Mummies in Ancient Egypt* (2005) can inform us about the lived reality of animals that were often bred and killed for ritual or for religious tourism.

The sources chosen deliberately place less emphasis on certain aspects of ancient life: we have included relatively little philosophical material (which has been very ably presented and discussed in sourcebooks by Newmyer (2010) and Harden (2013)), and equally little on the symbolic or metaphorical animal. Not only has this aspect been extensively studied, for example in Collins' edited volume *A History of the Animal World in the Ancient Near East* (2002) – a landmark in recognising the potential of animal studies, although the majority of contributions to the book focused on the ideological, literary and artistic representation of animals instead of the lived reality of ancient species – and Watanabe's *Animal Symbolism in Mesopotamia* (2002), an exploration of the lion and the bull in Sumerian, Assyrian and Babylonian ideology; in our estimation, concentration on the abstract cultural role of the animal has led the discussion too far from the actual animals which inhabited antiquity and is in some ways an artefact of modern social organisation.

III

If one considers the history of scholarship on ancient animals in broad outline over the last hundred years or so, it is possible to see some striking shifts in perspective. Academic works have been written against a background of radical change in human–animal relations: at the beginning of the twentieth century animals were widely used in transport and agriculture, lived in houses and barns with little check or control, and were often raised on a household scale for food. The decades which followed, however, saw the gradual eradication of animals (apart from a few favoured companion species) from urban life and a chemical and ecological war against them in domestic and agricultural contexts, leading to a contemporary age in which animals have been largely excluded from urban living and in which many wild animals are being pushed to extinction by the encroachment of human populations on their habitat. This background has had an often unspoken influence on scholarly approaches.

At the start of the twentieth century the first two influential studies of animals in the ancient world were published, Keller's *Die antike Tierwelt* (1909–13) and Keller and Imhoof-Blumer's *Tier- und Pflanzenbilder auf Münzen und Gemmen des klassischen Altertums* (1889); these were followed later by D'Arcy Thompson's *Glossary of Greek Birds* (1937) and *Glossary of Greek Fishes* (1947). To a large extent the purpose of these works was the identification of the vocabulary of ancient animals, with the intent of mapping a modern understanding of taxonomy onto antiquity. These works (sometimes still cited today) laid the foundation for the discussion of ancient animals and were followed by Richter's *Animals in Greek Sculpture* (1930) and some species-specific studies such as McDowell's *The Ape in Antiquity* (1928) and Hiltzheimer's study of dogs (*Antiquity* 1932), the aims of which were again to catalogue and present source material.

Subsequently species-specific studies continued to appear, including Gowers' articles on 'The classical rhinoceros' (1950 and 1951) and Scullard's *The Elephant in the Greek and Roman World* (1974), but the 1960s and 1970s brought a detectable change in approaches to the topic, which shifted from an interest in the practical and taxonomic to a concern with the symbolic, as scholarly interest moved to consider animals not as living creatures but as imagined by the ancients. Obviously this was part of the more general structuralist movement in academia, pioneered by French writers, but it also came at a tipping-point in Western attitudes towards animals, with the

growth of agribusiness, a rise in the use of pesticides and a decisive shift towards urban modes of living. Thus, beginning with studies such as that of Detienne and Vernant on the intelligence of the fox and octopus (1969), scholars became concerned with the cultural meaning of animals, and much written in subsequent decades has followed this pattern, from Franco's study of the canine and the feminine in Greece (2003) to the series of articles on the wolf in the classical world (Buxton 1987; Marcinowski 2001; Trinquier 2004), which move far from the behaviour of actual wolves to include discussion of werewolves and of the omen of wolves in the city. Similarly Forti's *Animal Imagery in the Book of Proverbs* (2008) and Foreman's *Animal Metaphors and the People of Israel in the Book of Jeremiah* (2011) are concerned with the conceptual construction of the animal in the biblical world but are far removed in focus from the lived experience of animals.

These implicit attitudes towards animals have also come to influence the interpretation of source texts: today we commonly find the works on animals by Aelian and the agricultural treatises of Varro and Columella interpreted as texts which may have animals as their ostensible topic, but are in fact about something else – they are usually taken as sophisticated political or moral satires (e.g. Kronenberg 2009; Smith 2014; Nelsestuen 2015). Scholars who inhabit a largely animal-free urban environment are much more comfortable with texts of a moral or political nature than with stories about animals – in our culture, after all, the animal story is for children. The same attitude of discomfort with real animals also seems to carry over into responses to studies of individual species. Many recent books on particular animals, including Hyland's *Equus: the horse in the Roman world* (1990), O'Daniel Cantrell's *The Horsemen of Israel* (2011), Engels' *Classical Cats* (1999), Schmidt's *Raben und Krähe in der Antike* (2002) and Greenlaw's *The Representation of Monkeys in the Art and Thought of Mediterranean Cultures* (2011) not only consider ancient textual and archaeological evidence but apply comparative behavioural information, often based on personal observation or experiment. Engels, for instance, compares his own cats' physical abilities to claims made about cats in ancient accounts, while Hyland and O'Daniel Cantrell both experimented with ancient tack on horses and Greenlaw observed primates at her mother's ape sanctuary. Because of this element of the personal, these works are often treated as though they have a somewhat para-academic flavour. But this is an odd response to what is in fact a very powerful idea – that animals today can be a living link with antiquity, allowing us to observe them now and test this against representations of their behaviour in the past, and to recreate animal–human relationships across the passage of time. Discomfort over the place of animals in modern life should not blind us to such an opportunity.

IV

A renascent scholarly interest in animals at present is obvious, and the most promising way forward is undoubtedly to be found in collaboration with other academic fields, specifically archaeology and anthropology. Interest in the archaeology of ancient animals has been relatively slow to emerge, in part as a result of disciplinary divisions, but a recent trend has emerged among zooarchaeologists to develop the application of their discipline beyond the descriptive and statistical, most notably in Russell's *Social Zooarchaeology: humans and animals in prehistory* (2011) and Sykes' bold and important study *Beastly Questions: animal answers to archaeological issues* (2014). While traditionally zooarchaeology has concentrated on documenting data and understanding the exploitation of animals for food and labour by human communities, scholars are now beginning to apply this evidence on a macro scale to address new kinds of questions about the interactions between animals and humans. A striking example of how this idea can be applied in the ancient context is Jashemski and Mayor's *A Natural History of Pompeii* (2001), a study which links literary,

artistic and archaeological evidence in a survey of the inhabitants of Pompeii, including mammals, birds, reptiles and insects. It investigates a human site, but the destruction caused by the eruption and consequent preservation of remains offers us a complete picture of animal life in the town, allowing us to see the weevils in the beans and the wild birds which visited, as well as the animals in the butchers or the stables. Anthropological approaches, too, are beginning to find their place in studies of the animal past, particularly with the suggestion that domestication should not be considered a hierarchical process, something humans do to other animals, but a reciprocal relationship which influences both parties (O'Connor 1997). Some very interesting studies of early Greek and Macedonian society have considered how the economically illogical choice to privilege the raising of cattle and horses might have shaped human cultures in the region (Howe 2008; McNerney 2010), while Way's *Donkeys in the Biblical World* (2011) has offered an illuminating exploration of interactions between human and animal in ancient Israel.

This sourcebook does not aspire to do more than outline the sources and the issues, but we hope that it provides the information which will make it possible for students and researchers to interpret the past in the ways outlined above. It documents the presence of animals in ancient life from lice to elephants and the constant interest that they inspired; it introduces some of the individual animals from the past which were named and memorialised, and it offers evidence for the kind of lives that animals lived.

★ ★ ★

The relationship between humans and animals has never been one of unadulterated bliss, a theme explored in antiquity in a series of myths, fables and religious teachings. In spite of aspirations towards ecological harmony (famously expressed by the prophet Isaiah's image of the lion and the lamb lying down together), the truth is that humans have often set themselves above the animal world and constructed an emotional distance between themselves and the animals they farmed, worked with or watched as entertainment. Consequently, not all the material presented here is easy to see or to read: at best humans could be negligent of animals, and at worst they might be deliberately cruel and vindictive. Farming practices reveal the routine abuse and neglect of working animals and some brutal treatment of animals raised for food, while cruel spectacles of entertainment involving animals (cock fighting, lion baiting, performing bears and many others) were enjoyed by all levels of ancient societies, finding their most extreme form in the Roman arena. But such sources must be included as relevant to the ancient cultures which form the focus of this book, and if anyone is moved or disturbed by these texts and images, they might like to consider donating to one of the organisations that campaign for the better treatment of animals today: the Society for the Protection of Animals Abroad (SPANNA), which campaigns for better treatment of working animals worldwide (www.spana.org), Compassion in World Farming (www.ciwf.org.uk) or the International Fund for Animal Welfare (www.ifaw.org).

Sian Lewis (St Andrews, October 2016)

Lloyd Llewellyn-Jones (Cardiff, October 2016)

Bibliography

[Where the title of a book or article is given in the text, it is not referenced here; all such references can be found in the bibliographies for the relevant species.]

P.C. Buckland, 'Granaries, stores and insects: the archaeology of insect synanthropy', in F. Sigaut and D. Fournier, *La préparation alimentaire des céréales* 26 (1991), 69–81.

- R. Buxton, 'Wolves and werewolves in Greek thought', in J. Bremmer (ed.), *Interpretations of Greek Mythology* (London 1987), 60–79.
- J. Davies, *The Birth of the Anthropocene* (Oakland, CA 2016).
- M. Detienne and J.-P. Vernant, 'La métis du renard et du poulpe', *REG* 82 (1969), 291–317.
- C. Franco, *Senza ritegno: il cane e la donna nell'immaginario della Grecia antica* (Bologna 2003).
- A. Harden, *Animals in the Classical World: ethical perspectives from Greek and Roman texts* (Basingstoke 2013).
- T. Howe, *Pastoral Politics: animals, agriculture and society in ancient Greece* (Claremont 2008).
- T. Ingold (ed.), *What Is an Animal?* (London and New York 1994).
- L. Kronenberg, *Allegories of Farming from Greece and Rome: philosophical satire in Xenophon, Varro and Virgil* (Cambridge 2009).
- J. McInerney, *The Cattle of the Sun: cows and culture in the world of the ancient Greeks* (Princeton 2010).
- A. Marcinowski, 'Le loup et les grecs', *Ancient Society* 31 (2001), 1–26.
- F. Mormann, J. Dubois, S. Kornblith, M. Milosavljevic, M. Cerf, M. Ison, N. Tsuchiya, A. Kraskov, R. Quian Quiroga, R. Adolphs, I. Fried and C. Koch, 'A category-specific response to animals in the right human amygdala', *Nature Neuroscience* 14 (2011), 1247–9.
- G.A. Nelsestuen, *Varro the Agronomist: political philosophy, satire and agriculture in the late Republic* (Columbus, OH 2015).
- S. Newmyer, *Animals in Greek and Roman Thought: a sourcebook* (Routledge Sourcebooks for the Ancient World) (London 2010).
- T.P. O'Connor, 'Working at relationships: another look at animal domestication', *Antiquity* 71 (1997), 149–65.
- O. Rackham, 'Ancient landscapes', in O. Murray and S. Price (eds), *The Greek City from Homer to Alexander* (Oxford 1990), 85–111.
- D. Smith, *Insects in the City: an archaeoentomological perspective on London's past* (Oxford 2012).
- S.D. Smith, *Man and Animal in Severan Rome: the literary imagination of Claudius Aelianus* (Cambridge 2014).
- A. Trinquier, 'Les loups sont entrés dans la ville: de la peur du loup à la hantise de la cité ensauvagée', in M.-C. Charpentier (ed.), *Les espaces du sauvage dans le monde antique: approches et définitions* (Besançon 2004), 85–118.

1

TAXONOMIES

Making sense of animals

Taxonomy is the science of naming, describing and classifying living organisms. The system most scientists use today classes each living creature into a series of seven or eight taxa which are organised from the most general to the most specific: these are Kingdom, Phylum, Class, Order, Family, Genus and Species. About 1,250,000 individual species are identified, most of which are invertebrates (Gibson 2016). In practice, however, few people apart from scientists find such classification very meaningful in day-to-day life: we tend to think about and describe animals in simple and functional ways, in categories such as ‘farm animals’, ‘wild animals’ or ‘bugs’, and we pay much more attention to large animals than we do to small. So in looking at the ancient world, it is important not to fixate on the question of how close to modern scientific theories ancient categories appear to be: the taxonomies which people used actually tell us a great deal about how animals and people interacted. How, then, did ancient peoples make sense of the animal world, in all its astonishing variety?

Ancient theories of animal classification certainly existed in the pre-classical world and something of this idea can be seen in a definitive feature of Egyptian hieroglyphic script called the ‘determinative’ – pictorial classifiers or supplementary pictographs which provide semantic information to the final meaning of a written word. Hieroglyphic script has a variety of categories including ‘TREE’, ‘BIRD’, ‘FISH’, ‘DIVINE’, ‘SENSES and EMOTION’ and ‘ABSTRACT’. Within these categories there are numerous divisions. For instance, all mammals or quadrupeds take on the ‘HIDE and TAIL’ determinative (based perhaps on a leopard skin: see LEOPARD no. 1) and this was considered to be a suitable marker for a range of animals, including crocodile, turtle, mouse, pig, dog, goat, panther, horse, lion, cat, monkey, hippopotamus, giraffe, bull and fly. Subordinate levels of categorisation operated too: under the basic level of mammal or quadruped a determinative sign of a ‘DOG’ could represent the *tjesm*, mastiff or pariah types of the species (for the hieroglyphic taxonomic system see Goldwasser 2002; for complications regarding ‘flying things’ see further BAT no. 2).

In Mesopotamia, Sumerian and Akkadian literature distinguished animals from humans, gods and daemons and ancient lexica presented words for animals in long lists (Foster 2002: 272–4). The most obvious distinction between animal types was the division into domestic animals and wild animals. The lists of domestic animals are detailed and subdivided into numerous categories mainly based upon sex, age and appearance (see DONKEY, GOAT, OX, SHEEP); wild animals are listed with fewer differences in sex, age or appearance. Some animals like the pig and the dog

are variously categorised as domestic or wild given that they were often thought of as domestic and yet not productive in the same way as goats, sheep and cattle were. The Mesopotamian category ‘wild animal’ was conveyed in Akkadian by the term *būl sēri* or *umām sēri*, ‘animals of the steppe’, suggesting in particular quadrupeds. But wild animals could also be referred to as ‘animals of the mountain’ (i.e. ‘foreign’) or even by the specific name of a foreign land such as ‘the ox of Lullubum (Kurdistan)’ or ‘the elephant of Barashe (Iran/Pakistan)’.

The history of taxonomy in classical antiquity is somewhat anomalous: Aristotle of course stands as the originator of the classifying tradition, as he brought his formidable intelligence to bear on the issue of how animals can usefully be grouped. He did not aim to produce a finished system of classification, but made great steps in setting the parameters for comparing animals by their physical characteristics, including birds, insects and marine animals as well as terrestrial mammals. So great was his achievement, however, that it seems to have stifled research in subsequent generations: Theophrastus, his successor at the Academy, among his many works wrote thematic treatises on animals which seem deliberately to resist taxonomic categories (e.g. *Of Animals Which Change Colour*, *Of Animals Which Burrow* (Diog. Laert.V.43–4; see also FISH no. 8)). The classifying baton was not picked up again until Linnaeus in the 1700s. Yet, for all his achievements, Aristotle’s preoccupations were those of a tiny educated class: his taxonomy was partially reproduced by some later scientific writers such as Pliny, but even specialists did not attempt to emulate his approach. Popular writers show no sign of understanding or using Aristotelian categories, as they were not immediately relevant to everyday experience; instead folk taxonomies remained dominant, with animals categorised in ways which were meaningful to farmers, hunters, religious authorities or other groups. We should not deny the high level of specialised knowledge about animals which developed in Greek and Roman society, but grand overall theories remained an abstract concern.

1. Babylonian animal-lists

Old Babylonian period, Sumerian and Akkadian glossary; Tablet XIV of the 𒄩AR.ra = 𒄩ubullû (following Finkel 2014)

Snake (*šēru*: 40 types)
 Turtle (*šeḫepṣu*: 3 types) and young
 Eel (*kuppū*)
 Rodent (*asqūdu*)
 Wild Bull (*riṃmu*: 2 types) and wild cow (*riṃtu*: 2 types)
 Elephant (*pīlu*: 2 types)
 Camel, dromedary (*ibīlu*: 2 types)
 Cow (*littu*: 2 types)
 Dog (*kalbu*: 19 types) and bitch (*kalbutu*)
 Lion (*nēsu*, *labbu*, *gīru*: 20 types) and lioness (*nēštu*)
 Wolf (*barbaru*, *parrisu*)
 Cheetah (or tiger?) (*mindīnu*; *dumāmu*?; *senkurru*)
 Leopard (*dumāmu*)
 Badger (*kalab urši*)
 Hyena (*būšu*: 2 types)
 Fox (*šeḫbu*)
 Cat (*šurānu*)
 Wild Cat (*murašū*)

Caracal (desert lynx) (*zirqatu*)
 Lynx (*azaru*)
 Zebu (?) (*apsasû*) and female zebu (*apsasîtu*)
 Monkey (ape) (*pagû*) and female monkey (ape) (*pagîtu*)
 Bear (*asu*)
 Bull (*lî'û*)
 Leopard (*nimru*)
 Eagle (*erû*: 5 types)
 Jackal (*zîbu*: 3 types)
 Wild Sheep (*bibbu*; *atûdu*)
 Wild Ram (*sappâru*)
 Steppe Bison (or aurochs?) (*ditânu*; *kusarikku*: 2 types)
 Red Deer (*lulîmu*: 2 types)
 Stag (*ayyâlu*: 2 types)
 Mountain Goat (*turâlu*)
 Roe Deer (*nayyâlu*: 2 types)
 Gazelle (*şabîtu*: 2 types) and kid (*huzâlu*)
 Buck (*daşû*)
 Hare (*arnabu*) and female hare (*arnabtû*)
 Bear (*dabû*) and she-bear (*dabîtu*)
 Pig (*şahû*: 23 types)
 Sow (*şahîtu*: 5 types) and piglet (*kurkizannu*)
 Wild Boar (*şah apî*)
 Porcupine (?) (*burmânu*: 3 types)
 Dormouse (*arrabu*; *uşummu*)
 Small Rodent (*piazu*: 3 types)
 Mongoose (*şikkû*: 2 types; *puşuddu*; *kāşîru*)
 Mouse (*humşîru*; *pērûrûtu*)
 Dormouse (*arrabu*)
 Rodent (*işkarissu*)
 Rodent (*kurusissu*)
 Vole (*harrînu*)
 Rodent (*aştakissu*)
 Shrew (*hulû*: 2 types)
 Jerboa (*akkaru*)
 Rodent (*asqudu*: 3 types)
 Otter (*tarpaşu*)
 Marten (*şakadirru*)
 Chameleon (*hurbabillu*; *ayyar-ili*: 4 types)
 Lizard (*andulhallatu*: 2 types; *şurârû*: 5 types)
 Tortoise (*raqqu*; *usâbu*)
 Crab (*kuşû*: 2 types; *alluttu*: 2 types)
 Locust or Grasshopper (*erbu*: 3 types; *irgilum*)
 Large Locust or Grasshopper (*şinnarabu*)
 Medium Locust or Grasshopper (*hîlammû*)
 Small Locust or Grasshopper (*zîru*)
 Tiny Locust or Grasshopper (*zerzerru*)
 Cricket (*şāşîru*: 3 types; *şarşaru*)

Praying mantis (*šā'ilu*: 2 types; *sikdu*; *adudillu*)
 Insect (*lallartu*: 3 types)
 Insect (*išid-bukannu*)
 Head-louse (*uplu*)
 Louse (*nābu*)
 Insect (*kalmatur*: 13 types)
 Insect (*šīlu*)
 Flea (*perša'u*)
 Weevil (*tal'ašu*)
 Termite (*buštītu*: 5 types)
 Moth (*ašašu*; *sāsu*: 7 types; *miqqānu*: 3 types; *mēqiqānu*)
 Bug (*iblu*)
 Worm (*tūtu*: 4 types; *urbatu*: 4 types)
 Earthworm (*išqippu*)
 Grub (*mubattinu*)
 Caterpillar or larva (*manu*: 8 types; *nappīlu*: 5 types; *ākīlu*: 5 types; *upinzir*: 3 types; *nāpīl*)
 Insect (*šassūru*: 3 types)
 Nit (*nēbu*)
 Fly (*zumbu*: 9 types)
 Horse Fly (*lamṣatu*)
 Small Fly (*baqu*: 3 types)
 Mosquito (*zaqqītu*)
 Gnat (*ašturu*: 2 types)
 Wasp (*kuzāzu*; *hāmitu*; *numbubtu*)
 Water Boatman (*ēšid pān mē*)
 Centipede (*hallulāya*: 2 types)
 Spider (*ettūtu*: 4 types; *anzūzu*; *lummū*)
 Jellyfish (*hammu*: 4 types)
 Insect (*mūr mē*)
 Water Insect (*ummi mē*)
 Dragon Fly (*kalilitu*; *kallat-šamaš*: 4 types)
 Ant (*kulbabu*: 8 types)
 Scorpion (*zuqqaqipū*: 11 types)
 Gecko (*pizalluru*: 3 types)
 Lizard (*humbibittu*)
 Frog (*muša' irānu*)
 Toad or Frog (*kitturu*: 7 types)

COMMENT: The *ḪAR-ra*=*hubullu* (*Urra*=*hubullu*, *ur₅-ra*=*hubullu*, or *Harra hubullu* (Hh)) is an important Mesopotamian encyclopaedia which glosses Sumerian and Akkadian lexical lists which are separated into categories and extend across 24 cuneiform tablets (Finkel 2014: 198–202). Compiled chiefly in the Old Babylonian period, and thereafter used for scribal practice, the title of the series is taken from the first gloss of Tablet I: *ur₅-ra* and *hubullu* simply mean 'a debt incurring interest' in the Sumerian and Akkadian languages, respectively. Lists of words are a common feature among the thousands of Sumerian and Akkadian cuneiform tablets; many lists are just groupings of common words, while others represent an inventory of the word meanings of the languages used in Mesopotamia. The lists constitute not only an invaluable tool for the understanding of these ancient languages, but a veritable repertoire of the material and intellectual

culture of the ancient Near East. Tablets 13 to 15 of the *ḪAR-ra=ḫubullu* are given over to animal topics and contain a systematic inventory of animal names in a form of systematic zoology. These texts are the oldest written sources of biological classification.

Tablet XIII lists domestic animals (see DONKEY, GOAT, SHEEP, OX) whilst Tablet XIV lists animals found in the wild. As Finkel (2014: 199) explains it,

the structure is consistent: a head section word, on the basis of Sumerian, acts like a dictionary hyperlink. Sumerian UR = Akkadian, *kalbu*, ‘dog’, for example, meaning dog, heads up a long run of words that are dog or dog-like that all begin with ur-.

The list of animals above follows, more or less, the order in which they occur in Tablet XIV. Finkel notes that in the original tablet, ‘types’ of animals are defined by certain sorts of information, including names, habitats, colours and even temperament; some of the animals listed are mythological, ‘but in and among the lexical distinctions are what we call distinct species’ (2014: 199). The result is that we know the names of all the species of wildlife which were familiarly encountered by the Mesopotamians and, through two dead languages, we can begin to understand how they conceived of the natural world.

2. Bird-names and birdcalls: Mesopotamian ornithology

a) The Birds of Nanše (after Veldhuis 2004)

The goose [came forth] from the pure reed-beds.
 It came forth from the pure reed-beds.
 The wise goose spent the day high in the skies.
 The goose cried out in the sky;
 [. . .] Its honking was sweet, its voice [was pleasing].
 My lady [was attracted by] her goose.
 Lady mother Nanše [was attracted by] her goose.
 I am the Lady, how beautiful is my goose and how beautiful am I
 She herself [descended] upon the water like a large goose.
 Stepping onto earth from heaven,
 [. . .] she [stood] in the water like a pure wild cow.
 A pure goose, a white wild cow [drank] water at the waterside
 She was clothed in huge waves.
 Nanše, the shining, the [. . .]
 of the Anuna, the great gods
 Lady mother Nanše, true woman,
 Nanše, sister praised by the Anuna gods,
 mother, beautiful matriarch of Enlil,
 delighting in her goose,
 erected a lapis lazuli shrine and set the pure goose by her feet.
 I am the Lady, so let my birds assemble for me where the sheaves are gathered.
 May the Bird step down from heaven to earth.
 May the Bird, whatever its name, roar.
 May the Bird that cannot be caught roar.
 This Bird, that no one is able to bind, this
 Bird darts by in the heavens.

Anzud decides the fates with the Anuna gods.
 The sharp-toothed bird in (?) the water sent forth wisdom [. . .]
 To my Lady [he said]: I am the bird, the sharp-toothed bird, because of my terror [. . .]
 To my Nanše, [he said]:
 I am the bird, the sharp-toothed bird, because of my terror [. . .]
 The imperial eagle [. . .]
 It (the eagle) kills wild bulls in the foothills.
 It kills ibexes in the high mountains.
 All you ducks, your eggs are shining bright, bird,
 duck, your eggs are shining bright!
 where do people carry your pure eggs, your [white] eggs to?
 The ostrich produces eggs bigger than a mountain.
 One takes these eggs as carrying baskets.
 The bird is familiar with the watch at night.
 The peacock keeps the watch at dawn.
 The pure bird calls 'Haja! Haja!' at dawn.
 A bird red from carnelian, blue from lapis lazuli
 white from chalcedony, with all kinds of gold for leather-with-gold inlay
 that is how the sculptor fashions a peacock.
 The bird in the sky, the buzzard – a weaver, the buzzard – a weaver;
 the vulture in the sky, the buzzard – a weaver the buzzard – a weaver
 its [wings] together, its feet together
 it grabs the [. . .] of the lonely kid.
 [. . .] its call to the ear(?) . . .
 [. . .] The call of the crane [. . .]
 In the house of the princely son it roars.
 [. . .] in the river, the reed beds [. . .] it perfects.
 The voice of the *buru5-az* bird is a bellowing wild bull's.
 The bird, a *nugig* priestess
 The snake-eater bird is green . . .
 [traces . . .] Its wings a barge [. . .]
 The *um* bird has [. . .] and a pure bill (?).
 The swan, having spread out breakfast (?)
 [. . .] it enters.
 [. . .] it laments for him.
 It brings (things) to the wealth of Ninhursag in the mountains.
 Since she is looking for her wealth,
 the bird is called *nig-gurmudum* ('it carries wealth' = magpie).
 The magpie calls out
 and laments in the desert of Keš.
 While twittering birds are flocking in the palace,
 the SALSAL bird sheds tears over itself.
 The egret, seemly in combed flax, is present at the quayside.
 The *gurug* heron is brown, and clad with a gun-garment in the reed beds.
 The UD.DU bird catches *azagur* fish.
 The *giri-ilu* bird, terror of the people, [calls] its 'Giri-ilu'.
 The stork [. . .] picks up [. . .] like grass.
 The *še* bird lays nest and chick outside its [. . .]

The *dubdubbu* [heaps up] dust so as to [refresh] itself
 The *šegšeg* bird sobs like a crying child.
 The *gubiguzaga* bird [. . .] like an angry man.
 [*e-sig*] birds, [like] ants in crevices [. . .]
Ba'u takes a bath because of [the swallows] [. . .],
 it organizes the divine ordinances for her.
 [. . .]
 The *tigilu* birds, binding the split roots, [. . .]
 The dove [pecks at] the ground in the broad field;
 while the pigeons [eat?] two-ban of wheat at the threshing floor of the king.
 The swan (and?) the *udar* bird, [like?] ants [. . .].
 The bird [bows down] on stinking earth
 The *giriš-šita-na* play like livestock
 [. . .] a shining bill, your bill is (?) pure . . .
 [. . .] humbly like an orphaned child [. . .] on the ground.
 The *hamun* bird in harmony [] is dressed in linen.
 The *dūr* bird [. . .].
 [. . .] The vine-eyed bird, like a vine [. . .].
 The partridge [keeps] watch.
 The partridge [calls] 'Tikutiku.'
 The *du-uš* bird [. . .] in the marshes
 The *adardar* bird [wears] the garment of the swallow.
 The TUM.keš2 bird, when the net is suspended [. . .] by itself [. . .].
 The *gukeš* birds [gather] in the bound marshes.
 The clipped goose [. . .] its spread wings and its head.
 The sleep bird calls 'Dilibipila' at dawn.
 The hoopoe cries 'Uludik, Uludik!'
 The hoopoe is brightly coloured like the *durdar* bird and has a crest on its head.
 The *nu-erimla* bird should not live in the holes of the reed walls.
 The *tirida* bird lies down with the outlaw in the reed thicket.
 [Nanše], you are she who loves the fishes and birds!
 You are she who does not scatter the [. . .] of my [. . .]
 You are she who does not belittle [. . .].
 [Lady] mother Nanše, it is sweet to praise you!

***b) The Sultantepe Tablets from Harran;
 c. 700–600 BCE (after Lambert 1970)***

The *aribanu* is [the bird of] Marduk. It saw him, abundance (?) . . . hunter.
 The cock is the bird of Enmešarra. Its cry is, 'You sinned against Tutu.'
 The francolin is the bird of Papsukkal. 'Kaka has been ravaged, to the weapon. . .'
 The heron is the bird of [. . .]. Its cry is, 'The nostrils are flat and its cheeks hollow.'
 Tammuz the shepherd.
 The *sihKUR* is the bird of Narudu. Its cry is, 'Alas, alas.'
 The *suššuru* is the bird of Anšar. Its cry is, 'How he is desolated.'
 The vulture is the bird of [. . .]. Its cry is, ' . . . the hero Zu. . .'
 The stork is the bird of the Crown Prince. Its cry is, ' . . . Away, away before the warrior
 Ninurta.'

The swallow is the bird of [. . .] the bird of Tiamat. Its cry is, 'Your symbol is a monster from whose mouth poison drips.'

The *kubšanu* is the bird of Nusku. Sirsir is Marduk, the sailor of the sea. Lofty Nabu, mighty Nabu, who. . .

The Katimatu is the bird of the sister of the Divine Seven. Its cry is, 'Brother, offspring of Anu.'

The goose is the bird of Asakku. Its cry is, 'They brought (me) up to the earth without (?) . . . In drinking water [. . .] they seek blood from me.'

The raven is the bird of Enlil. Its cry is, '[. . .] the citizens of Nippur a good omen.'

The falcon is the bird of Marduk. Its cry is, 'Šazu, who knows the heart of the gods, who looks into the mind.'

The partridge is the bird of Asakku. Its cry is, 'Go away, Asakku! Go away Asakku!'

The . . . is the bird of Šamaš . . .

The stork is the bird of the Crown Prince. [Its cry is], 'The warrior has gone forth [. . .]

The swallow is the bird of Zu/Ba'u. [Its cry is], 'Who crosses the sea [. . .]

The *ḥasiburu* is the bird of Nusku. [Its cry is], 'To Sirsir [. . .]

The vulture is the bird of Nabu. [Its cry is], 'Hero, hero Ninurta [. . .]

The *asumatanu* is the bird of Nergal. [Its cry is], 'Hero, hero Erra [. . .]

The *illabarra'a* is the bird of Nergal. [Its cry is], 'Hero, hero Erra [. . .]

The owl is the bird of Ea. Its cry is, 'Lament, lament.'

The duck is the bird of Kusu. Its cry is, 'Qingu, qingu, assemble and. . .

The goose is the bird of Duranki. [Its cry is], 'They brought me up without. . .

The partridge is the bird of Asakku. [Its cry is], 'Go away Asakku!'

The dove is the bird of Tammuz the shepherd. . .

The *suššuru* is the bird of Emmešarra. Its cry is, 'How he is desolated.'

The cock is the bird of Kaka, [Its cry is], 'You sinned against [Tutu].

The francolin is the bird of Kaka. [Its cry is], 'Sipazianna has been ravaged. . .

The heron is the bird of Narudu. [Its cry is], 'Its cheeks are hollow, its face is flat.'

The *katimatu* is the bird of Narudu. Its cry is, 'brother, brother.'

The *pa'u* is the bird of Tiamat. Its cry is. . .

The raven . . .

The *duqduqu* bird . . .

King of Kings, Lord of Lords. . .

The *ešurgurtu* bird. . .

COMMENT: *The Birds of Nanše* is an aetiological tale which explains how the goddess Nanše was responsible for giving life to all birds. Beginning as a narrative, the text then develops into a scene in which the birds are listed as they assemble, and ends with praise of the goddess. The story is not so much a religious text as a display of educated learning and it was frequently copied in the Old Babylonian period by scribes and scholars. Catalogues such as *The Birds of Nanše* are a feature of Mesopotamian and other Near Eastern literary compositions (see FISH no. 2b).

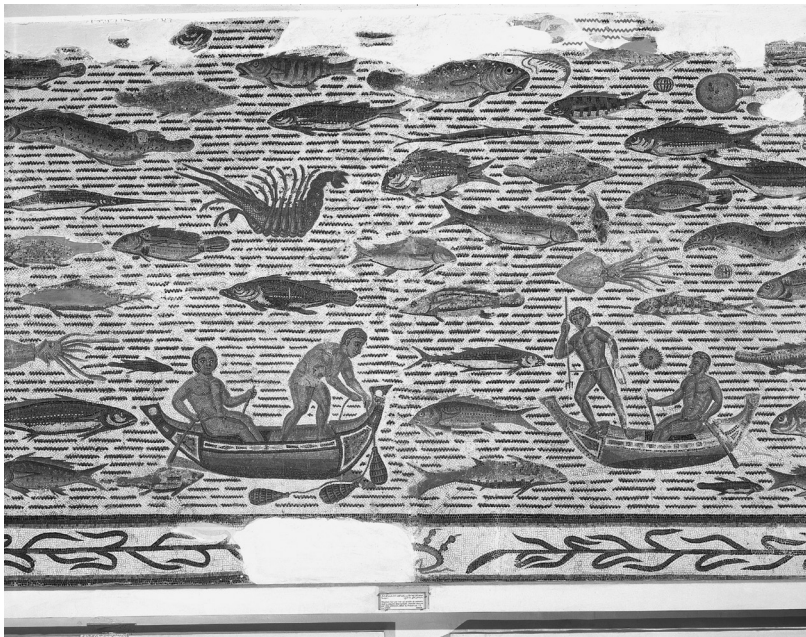
Although we may like to imagine *The Birds of Nanše* being used by some biology teacher of a Nippur school in a course identifying avian wildlife, such a notion is in fact anachronistic. The text is more pressingly concerned with knowledge of the Sumerian language, in particular of bird names. As is evident from the *ĦAR.ra* = *ḥubullá* texts, lists of trees, stones and animals were the ancient equivalents of biology; lists of places and cities corresponded to geography; lists of verbal forms belonged to linguistics, and so forth. In fact, *The Birds of Nanše* is one of several Near Eastern texts which deal with bird lexicons. Of course, our knowledge of the orthography

of bird names is less stable than might be hoped. Variations in spelling of the same word in different texts add to the frustrations of translation and identification. Moreover, many bird names are onomatopoeic, reflecting to varying degrees of success the bird's call; they are often written syllabically and are much less standardised than logographic spellings. To further confuse matters, the meaning of Sumerian words is initially established by looking at Akkadian translations in bilingual lexicon texts. But bird names easily switch from one species to another (as happens in modern English and its neighbour languages). Therefore, the identification of a Sumerian bird name involves at least three languages (Sumerian, Akkadian, modern language) and a time span of several millennia. The results are not necessarily wrong, but they are open to interpretation (see Veldhuis 2004 for a full and detailed commentary).

The tablets found at Sultantepe, in the plain of Harran, form a compact group dating between 700 and 600 BCE. The cuneiform texts appeared to represent a diverse array of categories, including medical texts, poems, prayers, rituals, vocabularies, omens, incantations and even astronomy, mathematics and economics. The bird-call texts follow in the tradition of earlier Mesopotamian lexical texts, as has been seen, but the formula is different in that each line entry begins 'bird X belongs to deity Y' and ends with an onomatopoeic attempt at replicating the bird call itself. Thus, the duck cries '*qingu, qingu*', i.e., 'quack, quack'. Often the sound of the bird call is 'interpreted' as a saying or an omen; thus, the cock's '*tahtata ana tutu*' ('cock-a-doodle-do') is heard as 'You sinned against Tutu'. It is likely that the bird-call text was used in rituals of divination. No comparable text is known for animals, although traces of a 'snake text' survive (see Foster 2002: 275; for fish lists see Civil 1961 and FISH no. 2b).

3. Knowledge of individual species

*Mosaic from Hadrumetum, Sousse Museum
(photograph: DeAgostini Picture Library/Scala, Florence)*



COMMENT: A lack of interest in classification need not indicate a lack of awareness of animal characteristics; rather the opposite. This mosaic was found in a wealthy house in Hadrumetum (modern Sousse) in Roman North Africa, placed in the corridor leading to the main reception room. It depicts four boats fishing in a sea rippled with waves, among an astonishing variety of marine life. Almost fifty different kinds of fish and shellfish are shown in this surviving section, all over lifesize and each carefully individuated: no two species are the same, and all are identifiable as real Mediterranean fish (Reese 2001). The many Roman mosaics depicting fish (and birds) in naturalistic landscapes bear witness to a detailed awareness of the forms and appearances of animals among ancient peoples, far more so than is common today among the general population. Fish mosaics first became popular in the first century CE, and some particularly fine examples were found at Pompeii, depicting more than twenty different fish species in a rocky bay (Reese 2001). The later North African fish mosaics tend to be less naturalistic in setting, but include even greater numbers of species. Certainly, as Blanchard-Lemée suggests, they evoke the richness of the resources offered by the sea (Blanchard-Lemée et al. 1996: 128), but they also speak to the viewer's delight in cataloguing and recognising different fish. There certainly existed a range of simple taxonomies for fish, from the simple edible/inedible distinction to the division by habitat detectable in Oppian's *Halieutica*, which discusses fish that inhabit rocky shores, sandy shores, muddy shores and the deep sea; the mosaics, however, seem to aim for an impression of teeming marine life without any desire to present like with like (on the exuberance of natural life in Roman art, see also Toynbee 2013: 284–8).

This visual knowledge is mirrored in written form by the detailed 'fish-list' inscriptions which survive from Hellenistic Greece: these are lists of fish and their appropriate prices posted by market officials in Greek communities (Lytle 2010). An inscribed fish-list from Hellenistic Boiotia, for instance, lists between sixty-five and seventy named sea fish species and six freshwater species, all of which could thus be recognised in the market, not only by fishermen and sellers, who might be thought to be experts, but also by customers and civic officials. A detailed knowledge of the natural world can thus be seen to have permeated ancient societies, in a practical tradition quite separate from scientific and philosophical concerns.

4. Folk taxonomies

a) '*Vermin*': *Geoponica Book XIII, list of contents*

1. Against locusts; 2. Against the *bruchus*; 3. Against weasels; 4–5. Against mice; 6. Against cats; 7. Against moles; 8. Against snakes; 9. Against scorpions; 10. Against ants; 11. Against gnats; 12. Against flies; 13. Against bats; 14. Against bugs; 15. Against fleas; 16. Against cantharides beetles; 17. Against leeches; 18. Against frogs.

b) *Poisonous animals: Nicander Theriaca, list of topics*

Lines 121–482: snakes; 483–7: the gecko; 715–58: spiders; 759–68 the moth; 769–804: scorpions; 805–14: insects; 815–16: the shrew-mouse; 817–21: salamander; 822–36: moray, stingray and weever fish.

COMMENT: Folk taxonomies divide animals into groups in a way that helps individuals to navigate the world. So, for instance, Book XIII of the *Geoponica*, a practical manual on farm management, collects methods of repelling pests from crops or livestock. Underlying the chapter is the concept of 'vermin', animals which are harmful to people because they eat crops or stored food,

are parasites of animals or humans, prey on livestock or are simply annoying, like an incessantly croaking frog. Such a category obviously has little to do with scientific taxonomies, including as it does insects, mammals, reptiles, amphibians and worms, but it is more immediately relevant to day-to-day experience. Similar categorisation occurs in other agricultural texts, such as Virgil's *Georgics*, in which the problematic animals of the threshing-floor are listed as the mouse, mole, toad, weevil and ant (l.181–6; see also Nollé 2005). Nicander's *Theriaca*, a poem listing poisonous animals and remedies for their bite or sting, offers a different kind of categorisation of animals into harmful and harmless; he includes reptiles, insects, mammals and fish in the overarching category 'poisonous'. At an everyday level taxonomies like these, which used the nature of animal interaction with humans, rather than morphology or behaviour, as their classifying tool, were practical and important, telling people how to react to a given animal should they encounter it.

5. Clean and unclean animals

a) Hebrew bible, Deuteronomy 14.3–21

Do not eat any detestable thing. These are the animals you may eat: the ox, the sheep, the goat, the deer, the gazelle, the roe deer, the wild goat, the ibex, the antelope and the mountain sheep. You may eat any animal that has a divided hoof and that chews the cud. However, of those that chew the cud or that have a divided hoof you may not eat the camel, the rabbit or the hyrax. Although they chew the cud, they do not have a divided hoof; they are ceremonially unclean for you. The pig is also unclean; although it has a divided hoof, it does not chew the cud. You are not to eat their meat or touch their carcasses.

Of all the creatures living in the water, you may eat any that has fins and scales. But anything that does not have fins and scales you may not eat; for you it is unclean.

You may eat any clean bird. But these you may not eat: the eagle, the vulture, the black vulture, the red kite, the black kite, any kind of falcon, any kind of raven, the horned owl, the screech owl, the gull, any kind of hawk, the little owl, the great owl, the white owl, the desert owl, the osprey, the cormorant, the stork, any kind of heron, the hoopoe and the bat.

All flying insects are unclean to you; do not eat them. But any winged creature that is clean you may eat.

Do not eat anything you find already dead. You may give it to the foreigner residing in any of your towns, and they may eat it, or you may sell it to any other foreigner. But you are a people holy to the Lord your God.

b) Hebrew bible, Leviticus 11.2–43

Say to the Israelites: Of all the animals that live on land, these are the ones you may eat: You may eat any animal that has a divided hoof and that chews the cud. There are some that only chew the cud or only have a divided hoof, but you must not eat them. The camel, though it chews the cud, does not have a divided hoof; it is ceremonially unclean for you. The hyrax, though it chews the cud, does not have a divided hoof; it is unclean for you. The rabbit, though it chews the cud, does not have a divided hoof; it is unclean for you. And the pig, though it has a divided hoof, does not chew the cud; it is unclean for you. You must not eat their meat or touch their carcasses; they are unclean for you.

Of all the creatures living in the water of the seas and the streams you may eat any that have fins and scales. But all creatures in the seas or streams that do not have fins and scales – whether among all the swarming things or among all the other living creatures in the water – you are to regard as unclean. And since you are to regard them as unclean, you must not eat their meat; you must regard their carcasses as unclean. Anything living in the water that does not have fins and scales is to be regarded as unclean by you.

These are the birds you are to regard as unclean and not eat because they are unclean: the eagle, the vulture, the black vulture, the red kite, any kind of black kite, any kind of raven, the horned owl, the screech owl, the gull, any kind of hawk, the little owl, the cormorant, the great owl, the white owl, the desert owl, the osprey, the stork, any kind of heron, the hoopoe and the bat.

All flying insects that walk on all fours are to be regarded as unclean by you. There are, however, some flying insects that walk on all fours that you may eat: those that have jointed legs for hopping on the ground. Of these you may eat any kind of locust, katydid, cricket or grasshopper. But all other flying insects that have four legs you are to regard as unclean.

You will make yourselves unclean by these; whoever touches their carcasses will be unclean till evening. Whoever picks up one of their carcasses must wash their clothes, and they will be unclean till evening.

Every animal that does not have a divided hoof or that does not chew the cud is unclean for you; whoever touches the carcass of any of them will be unclean. Of all the animals that walk on all fours, those that walk on their paws are unclean for you; whoever touches their carcasses will be unclean till evening. Anyone who picks up their carcasses must wash their clothes, and they will be unclean till evening. These animals are unclean for you.

Of the animals that move along the ground, these are unclean for you: the weasel, the rat, any kind of great lizard, the gecko, the monitor lizard, the wall lizard, the skink and the chameleon. Of all those that move along the ground, these are unclean for you. Whoever touches them when they are dead will be unclean till evening. When one of them dies and falls on something, that article, whatever its use, will be unclean, whether it is made of wood, cloth, hide or sackcloth. Put it in water; it will be unclean till evening, and then it will be clean. If one of them falls into a clay pot, everything in it will be unclean, and you must break the pot. Any food you are allowed to eat that has come into contact with water from any such pot is unclean, and any liquid that is drunk from such a pot is unclean. Anything that one of their carcasses falls on becomes unclean; an oven or cooking pot must be broken up. They are unclean, and you are to regard them as unclean. A spring, however, or a cistern for collecting water remains clean, but anyone who touches one of these carcasses is unclean. If a carcass falls on any seeds that are to be planted, they remain clean. But if water has been put on the seed and a carcass falls on it, it is unclean for you.

If an animal that you are allowed to eat dies, anyone who touches its carcass will be unclean till evening. Anyone who eats some of its carcass must wash their clothes, and they will be unclean till evening. Anyone who picks up the carcass must wash their clothes, and they will be unclean till evening.

Every creature that moves along the ground is to be regarded as unclean; it is not to be eaten. You are not to eat any creature that moves along the ground, whether it moves on its belly or walks on all fours or on many feet; it is unclean. Do not defile yourselves by any of these creatures. Do not make yourselves unclean by means of them or be made unclean by them.

COMMENT: one approach to the understanding of ancient taxonomies is to look at the way in which the animal world was separated between clean and unclean species. Ancient Hebrew rules of *kashrut* – dietary laws – emphasised that there was no distinction between religious and secular life and what one ate was as much a part of religious practice as prayer (Allen 2016: 161–77; see also Douglas 1966). In ancient Judaism (especially so during the Exile era and its aftermath) the observation of laws on food and its preparation became a spiritual practice and a way of separating Jews from other peoples. It is clear from temple offering lists, prayers and hymns that, throughout the ancient Near East, most people ate animals indiscriminately. A Hymn to Nanna found at Nippur (Riley 2015: 29–30) reveals the variety of wildlife ‘consumed’ by the deity and therefore considered proper for human consumption:

Open the temple, oh porter. . . !
 I bring fattened sheep. . .
 I have emptied by stockyard. . .
 I bring suckling-pigs. . .
 I, Asimbabbar, bring dormice;
 I, Asimbabbar, bring small singing birds,
 I have brought my poultry yard of small fowl,
 I have brought hares. . .
 I have brought quantities of carp. . .
 I have carp from my ponds. . .
 I have baskets full of eggs. . .
 My billy-goats have sired many kids,
 Which I have taken from their mothers. . .
 My bulls have fathered calves
 Which I have taken from quantities of cows
 Along the river banks.

However, in the biblical texts, animals are separated into three groups: land animals, sea creatures and winged flying creatures (note that the bat is therefore included alongside birds). Animals, it is stressed, should be slaughtered specifically for food and observant Jews must not eat anything that died a natural death: even if a wild animal was discovered to have been wounded by predators, it could not be eaten. Further stipulations insist that in order to be *kosher* (fit) land animals have to chew the cud and have a split hoof; if they do not have these distinguishing qualities then animals must be regarded as *treif* – ‘torn’, referring to animals savaged by wild beasts and therefore not slaughtered correctly. For fish to be *kosher* they must have scales and fins; anchovies are kosher but shrimps, lobsters, oysters and eels are *treif*. Most domestic birds were *kosher* but the majority of wild birds – and especially birds of prey which feed on the flesh of other creatures – were absolutely *treif* (see further Moskala 2000).

We must be careful not to regard the dietary laws as evidence that meat constituted a substantial portion of the ancient Hebrew diet, for it did not. Diets in antiquity were predominantly vegetarian and the use of animal products was largely confined to milk and cheese. Meat was consumed at important occasions only, usually as the result of a sacrifice. In that respect, every meal of meat can be regarded as a sacred meal. Restrictions on diet occurred in other ancient societies, of course, but nothing is found on a par with the biblical regulations. Neither Deuteronomy nor Leviticus offer a rationale for the division of animals into clean and unclean and therefore the food laws fall into a category of scripture called *hukiml chukkim* (‘where no reasons are given’). It is possible that originally the dietary laws were only followed by the priesthood whilst ordinary

Jews observed them only when they visited the Temple in Jerusalem to offer sacrifice. But following the destruction of the Temple in 70 CE, the family dining table came to be regarded as the primary replacement for the Temple's altar of sacrifice and gained importance as a sacred space. The laws of cleanliness and the perception of clean and unclean animals therefore embedded themselves into Jewish identity.

6. Aristotle's 'groups'

Aristotle Historia Animalium 490b 7 – 491a 6

The main groups (*genē*) into which animals are divided are these: birds, fish and cetaceans. All of these are animals which have blood. Another group is the hard-shelled animals, known as shellfish, and another the soft-shelled animals, which has no collective name, but includes crayfish, crabs and lobsters. Another group is the soft-bodied animals, such as squid and cuttlefish, and another the segmented animals (= insects). All these last four groups are bloodless, and if they have feet, they are many-footed. Some of the insects in addition have wings. The remaining animals do not fall into large groups, because we do not find a single group which encompasses many kinds of animal: either a kind is simple and without differentiation of form, as for example humankind, or there are differences of form, but without each type having its own name. So, for example, all four-footed animals without wings have blood, but some are viviparous and others oviparous; of the viviparous quadrupeds all have hair, and the oviparous ones scales, which are similar to the scales of fish [in position].

The group of snakes is by nature without feet, though they have blood and live on land; all have scales. Most snakes are oviparous, but the viper alone is viviparous. Not all viviparous animals have hair – certain fish are viviparous too. But all creatures which have hair are viviparous, if one counts spines as a kind of hair, as hedgehogs and porcupines have; these spines are the equivalent of hair, and not of feet as in the case of sea-urchins.

There are many forms within the group of viviparous quadrupeds, but none has a name: each animal in the group has an individual name, in the same way as humans, such as lion, deer, horse, dog and so forth. [Except for the group called 'bushy-tailed', which comprises the horse, ass, mule and hinny, and the 'half-asses' of Syria, so-called because they resemble mules, though they are a separate species, as is shown by the fact that they can breed with each other.] And therefore we must take each animal separately to examine its individual nature.

505b 25–32

We must next examine the internal anatomy of the blooded animals, for this is the primary distinction between the main groups of animals, that some have blood and others are bloodless. The blooded animals are the oviparous and viviparous quadrupeds, birds, fish and cetaceans, and any other groups with have no collective name because they constitute only one type, as in the case of humans.

Aelian On the Nature of Animals XI.37

The group called selachians are fish which do not possess scales, including the murena, conger, ox-ray, stingray, electric ray and dogfish. [Cetaceans include. . .] the dolphin,

whale and seal, and these alone among aquatic animals give birth to live offspring. The boneless animals are classed as 'Soft-bodied', and these include the octopus, cuttlefish, squid and sea anemone; these have neither blood nor intestines. Soft-shelled animals include the lobster, prawn and sea and river crabs; all these cast their shells. Hard-shelled animals include oysters, murex, whelks, trumpet-shells, sea urchins and spiny lobsters. The saw-toothed animals include the wolf, dog, lion and leopard, and all of these are carnivores. Animals with teeth in both the upper and lower jaw are humans, horses and asses, and these animals also have fat. Animals with flat teeth are the cow, sheep and goat. Animals with projecting teeth are the wild pig and the mole (I do not regard the elephant's tusks as teeth, but as horns). Insects include the wasp and bee, and these animals are said to be without lungs.

Amphibious animals include the hippopotamus, otter, beaver and crocodile. Scaled animals include the lizard, salamander, tortoise, crocodile and snake; all of these cast their skin, with the exception of the crocodile and tortoise. Solid-hoofed animals are the horse and ass; animals with cloven hooves include the ox, deer, goat, sheep and pig. Animals with toes are humans and dogs. The web-footed birds with flat claws include the swan and goose, and the hook-taloned birds hawks and eagles. The characteristics of other animals I have described elsewhere in my work.

COMMENT: To attempt to summarise Aristotle's taxonomic understanding seems a rash endeavour when it has generated so much discussion among scholars, but his classification of animals requires some comment: the passages above show how advanced (by modern standards) his methods of comparing and understanding the animal kingdom were. The terms which he used, *genos* (group) and *eidos* (type), have come into modern use in Latinised form as 'genus' and 'species', though it is important not to treat them as equivalents. What Aristotle tried to do, as an organising principle of his *Historia Animalium*, was to distinguish between individual types of animal and the larger groups to which they (can be said to) belong. Previous philosophers had suggested various basic distinctions between animals – those of land and water, for instance, or quadrupeds versus bipeds versus many-footed creatures – but Aristotle rejected such simple divisions as inadequate to the variety of animal forms and behaviours (*PA* 642b 5 – 644a 12; *GA* 732b 15–28). He did retain a fundamental distinction between animals with blood and those without, and within this scheme then classified animals into large overarching groups to which he gave collective names where they were lacking. In the first extract he lists as groups birds, fish, snakes, insects and cetacea and three types of sea animals, in modern terms the testacea, crustacea and cephalopods. At this point he declines to classify other animals, but later he divides the rest into viviparous and oviparous quadrupeds. The collective characteristics of each group are then described at particular points (see *FISH* no. 8). It is not a complete classification, since amphibians are lacking, and certain animals such as the seal and bat proved difficult to place; Aristotle also chose on principle to exclude humans from his schema altogether, even though we clearly number among the viviparous quadrupeds (see *BAT* no. 4; *HUMAN* no. 11). But he was not aiming to classify for its own sake, but rather to organise his studies of animal anatomy in a systematic way.

Aelian, writing more than five centuries after Aristotle, offers an instructive contrast, demonstrating that Aristotle's classification had not become mainstream even among specialised authors; instead it shows the more diverse approach to animal taxonomy which predominated. Aelian's classes of marine animals seem to be drawn directly from Aristotle (above), but the groupings of land animals are much more various, moving from description of bodily form to distinction by teeth (and hence diet), then by habitat, and then by hooves and feet, finally moving into birds. It is notable that he describes several cross-cutting categories: horses are both 'amphodonta' and

solid-hooved, and the crocodile both amphibious and scaled. Aelian retains the object of classing like animals with like and establishing characteristic members of each group, but the diversity of his categories makes universal classification impossible. Pliny, in organising his encyclopaedic *Natural History*, had not tried to replicate Aristotelian classification, but presented his four books on animals divided by habitat – animals of land, air, sea and insects – and within each book by size, starting with the largest animal (elephant, ostrich and whale), and for insects, the most significant in human terms, the bee. Some ghosts of Aristotle's *genē* can nevertheless be traced in his treatment of birds, as he refers to three broad categories of raptors, clawed birds and web-footed birds, but he then divides the clawed birds into *oscines* and *alites*, a distinction borrowed from augury rather than science (X.43; see Hall 1991). As noted above, it was not until many centuries later that the principle of classification came to intellectual prominence again.

7. Creation and world order as a divine plan

a) Enki and the World Order (*extracts*); *Babylonian myth* (after Black et al. 2004: 215–25)

In a state of high delight Enki, the king of the Abzu, . . . justly praises himself in his majesty: 'I am the lord, I am one whose word is reliable, I am one who excels in everything. At my command, sheepfolds have been built, cow-pens have been fenced off. When I approach heaven, a rain of abundance rains from heaven. When I approach earth, there is a high carp-flood. When I approach the green meadows, at my word stockpiles and stacks are accumulated. I have built my house, a shrine, in a pure place, and named it with a good name. I have built my Abzu, a shrine, in . . ., and decreed a good fate for it. The shade of my house extends over the . . . pool. By my house the *suhur*-carp dart among the honey plants, and the *ectub*-carp wave their tails among the small *gizi* reeds. The small birds chirp in their nests. The lords . . . to me. I am Enki! They stand before me, praising me . . .

He presented animals to those who have no city, to those who have no houses, to the Martu nomads . . .

Then he proceeded to the land of Meluha. Enki, lord of the Abzu, decreed its fate:

'Black land, may your trees be great trees, may your forests be forests of highland *mes* trees! Chairs made from them will grace royal palaces! May your reeds be great reeds, may they . . .! Heroes shall . . . them on the battlefield as weapons! May your bulls be great bulls, may they be bulls of the mountains! May their bellowing be the bellowing of wild bulls of the mountains! The great powers of the gods shall be made perfect for you! May the francolins of the mountains wear cornelian beards! May your birds all be peacocks! May their cries grace royal palaces! May all your silver be gold! May all your copper be tin-bronze! Land, may all you possess be plentiful! May your people . . .! May your men go forth like bulls against their fellow men!'

[2 lines unclear]

He cleansed and purified the land of Dilmun. He placed Ninsikila in charge of it. He gave . . . for the fish spawn, ate its . . . fish, bestowed palms on the cultivated land, ate its dates. . . . Elam and Marhaci [. . .] to devour [. . .] The king endowed with strength by Enlil destroyed their houses, demolished (?) their walls. He brought their silver and lapis-lazuli, their treasure, to Enlil, king of all the lands, in Nibru.

Enki presented animals to those who have no city, who have no houses, to the Martu nomads.

After he had turned his gaze from there, after father Enki had lifted his eyes across the Euphrates, he stood up full of lust like a rampant bull, lifted his penis, ejaculated and filled the Tigris with flowing water. He was like a wild cow mooing for its young in the wild grass, its scorpion-infested cow-pen. The Tigris . . . at his side like a rampant bull. By lifting his penis, he brought a bridal gift. The Tigris rejoiced in its heart like a great wild bull, when it was born . . . It brought water, flowing water indeed: its wine will be sweet. It brought barley, mottled barley indeed: the people will eat it. It filled the E-kur, the house of Enlil, with all sorts of things . . .

He issued a challenge . . . Enki placed in charge of all this him from whose net no fish escapes, him from whose trap no living thing escapes, him from whose bird-net no bird escapes,

1 line unclear

[. . .], who loves fish.

He raised a holy crown over the upland plain. He fastened a lapis-lazuli beard to the high plain, and made it wear a lapis-lazuli headdress. He made this good place perfect with grasses and herbs in abundance. He multiplied the animals of the high plain to an appropriate degree, he multiplied the ibex and wild goats of the pastures, and made them copulate. Enki placed in charge of them the hero who is the crown of the high plain, who is the king of the countryside, the great lion of the high plain, the muscular, the hefty, the burly strength of Enlil, the king of the hills.

He built the sheepfolds, carried out their cleaning, made the cow-pens, bestowed on them the best fat and cream, and brought luxury to the gods' dining places. He made the plain, created for grasses and herbs, achieve prosperity . . .

***b) The Quarrel Between Summer and Winter (extracts);
Mesopotamian contest fable (after Vanstiphout 2003)***

Enten, from the brink of the hill country
Took in hand the early flooding, bounty and life of the Nation.
He set his foot upon Tigris and Euphrates like a big bull,
And let them free upon the fruitful fields of Enlil.
The sea he fashioned (into) [. . .]
Enten (also) brought forth [. . .]
The bull (he) surrounded with reeds both young and old (. . .).
Ninurta, Enlil's heroic son,
Took away the water from the great fields
. . .
. . . The ox shakes its head in the yoke.
. . .
. . . the goat (bore) kids.
Cows and calves he made teem; he gathered ghee and milk;
In the high steppe deer and buck rejoice.
The birds of heaven build their nests all over.
The fish of the swamps lay their eggs in the reed thickets.
In the orchards honey and wine are dripping onto the ground;
The orchards are in full fruit.
The gardens grow legumes and sprout vegetables.
The grain becomes heavy in the furrow

Ashnan appears as a fair young maid;
And thus did the Harvest, the great feast of
Enlil, raise its head towards heaven.
Emesh made a barn; he widened sheepfold and stall;
He added to the abundance in the great fields;
And all the produce he put aside
The abundant harvest he brought into the estate, he gathered the heaps of grain.
He founded cities and villages; he built the temple of the Nation.
He caused the House of the gods to appear like a hill on a pure place.
The House-of-Life, holy abode of kingship, fit for the lofty dais,
He founded in abundance for great mountain Enlil.
Emesh, heroic son of Enlil,
Then decided to bring offerings to the House of
Life, Enlil's abode.
Wild animals, cattle and sheep of the hill country,
Wild rams, deer and buck, all fully grown,
Mountain sheep, noble sheep, fat-tailed sheep he brought.
Pigs grown fat in the midst of the reed thicket, porcupine and tortoise,
Birds on their nest, brooding their eggs.
All harvest produce, flour and malt for mixing, ghee and milk from sheepfold and stall;
Rye, egg-beans, small beans, large beans in basketfuls;
Onions which took sweetness when in their furrows, garlic and shallots,
Beet, cress,
Enten, proud son of Enlil,
[. . .]
For the sheep which is being disputed—it is fattened but at its side there is a scorpion. . .
[. . .]
The fattened Bibra-bird, the Esig-bird, the Shurrabird and the Ushtur-bird,
The carp . . . which Enlil made grow up;
The pomegranates which he gathered . . . ;
Large beetroots, a large GUG-loaf cut, garlic cut with the cleaver;
Enten himself carried the offerings he brought.
Emesh, heroic son of Enlil
Then decided to bring offerings to the House of
Life, Enlil's abode
Bucks and lambs of the mountain-sheep.
Emesh and Enten drove together the gift of young cattle;
The two of them, like butting bulls they reared themselves for battle.

c) Akhenaten's Great Hymn to the Aten (after Lichtheim 1976: 96–9)

You rise beautiful from the horizon on heaven,
living disk, origin of life.
You are arisen from the horizon,
you have filled every land with your beauty.
You are fine, great, radiant, lofty over and above every land.
Your rays bind the lands to the limit of all you have made,
you are the sun, you have reached their limits.

You bind them (for) your beloved son.
You are distant, but your rays are on earth,
You are in their sight, but your movements are hidden.
You rest in the western horizon, and the land is in darkness in the manner of death,
sleepers in chambers, heads covered,
no eye can see its other.
Anything of theirs can be taken from under their heads, they would not know.
Every lion goes out from its den,
every snake bites.
Darkness envelops, the land is in silence, their creator is resting in his horizon.
At daybreak, arisen from the horizon, shining as the disk in day,
you remove the darkness, you grant your rays,
and the two lands are in festival,
awakened and standing on their feet.
You have raised them up, their bodies cleansed, clothing on,
their arms are in adoration at your sunrise.
The entire land carries out its tasks,
every herd rests in its pastures,
trees and plants are sprouting,
birds flying up from their nests,
their wings in adoration for your spirit.
Every flock frolics afoot,
all that fly up and alight,
they live when you have shone for them.
Boats sail north and south too,
every road is opened at your sunrise,
and the fish on the river leap at the sight of you
Your rays penetrate the Great Green.
You who cause the sperm to grow in women,
who turns seed into people,
who causes the son to live in the womb of his mother,
who silences him in stopping him crying.
Nurse in the womb, who gives breath to cause all he has made to live,
when he goes down from the womb to breathe on the day of his birth,
you open his mouth in form,
you make his needs.
When the chick in the egg speaks in the shell,
you give it breath within to cause it to live,
you have made him, he is complete, to break out from the egg,
and he emerges from the egg to speak to his completion,
and walks on his legs, going out from it.
How numerous are your works, though hidden from sight.
Unique god, there is none beside him.
You mould the earth to your wish, you and you alone.
All people, herds and flocks,
All on earth that walk on legs,
All on high that fly with their wings.
And on the foreign lands of Khar and Kush, the land of Egypt

You place every man in his place,
you make what they need,
so that everyone has his food,
his lifespan counted.
Tongues are separated in speech, and forms too –
Their skins are made different,
for you make foreign lands different.
You make a Flood in the underworld, and bring it at your desire
to cause the populace to live, as you made them for you,
lord of all they labour over,
the lord of every land.
Shine for them, O disk of day, great of dignity.
All distant lands, you make them live,
you place a Flood in the sky, to descend for them,
to make waves over the mountains like the Great Green,
to water their fields with their settlements.
How effective they are, your plans, O lord of eternity!
A Flood in the sky for foreigners, for the flocks of every land that go on foot,
and a Flood to come from the underworld for Egypt,
your rays nursing every meadow,
you shine and they live and grow for you.
You make the seasons to nurture all you made,
winter to cool them,
heat so they may taste you.
You have made the far sky to shine in it,
to see what you make, while you are far, and shining in your form as living disk.
risen, shining, distant, near,
you make millions of forms from yourself, lone one,
cities, towns, fields, the road of rivers,
every eye sees you in their entry,
you are the disk of day, master of your move,
of the existence of every form,
you create . . . alone, what you have made.
You are in my heart, there is none other who knows you
beside your son Neferkheperure-sole-one-of-Re.
You instruct him in your plans, in your strength.
The land comes into being by your action, as you make them,
and when you have shone, they live,
when you rest, they die.
You are lifetime, in your body,
people live by you.
Eyes are on your beauty until you set.
All work is stopped when you set on the west;
shine, and strengthen (all for) the king.
Motion is in every leg, since you founded the earth,
you raise them for your son who come from your body,
the king who lives on Right, Lord of the Two Lands,
Neferkheperure-sole-one-of-Ra,

son of Re who lives on Right, Lord of Risings,
Akhenaten, Great in his Lifespan,
and the Great Royal Wife whom he loves, Lady of the Two Lands,
Neferneferuaten Nefertiti, live forever.

d) Hebrew bible, Psalm 104

He makes springs pour water into the ravines;
it flows between the mountains.
They give water to all the beasts of the field;
the wild donkeys quench their thirst.
The birds of the sky nest by the waters;
they sing among the branches.
He waters the mountains from his upper chambers;
the land is satisfied by the fruit of his work.
He makes grass grow for the cattle,
and plants for people to cultivate—
bringing forth food from the earth:
wine that gladdens human hearts,
oil to make their faces shine,
and bread that sustains their hearts.
The trees of the Lord are well watered,
the cedars of Lebanon that he planted.
There the birds make their nests;
the stork has its home in the junipers.
The high mountains belong to the wild goats;
the crags are a refuge for the hyrax.
He made the moon to mark the seasons,
and the sun knows when to go down.
You bring darkness, it becomes night,
and all the beasts of the forest prowl.
The lions roar for their prey
and seek their food from God.
The sun rises, and they steal away;
they return and lie down in their dens.
Then people go out to their work,
to their labour until evening.
How many are your works, Oh Lord!
In wisdom you made them all;
the earth is full of your creatures.
There is the sea, vast and spacious,
teeming with creatures beyond number—
living things both large and small.
There the ships go to and fro,
and Leviathan, which you formed to frolic there.
All creatures look to you
to give them their food at the proper time.
When you give it to them,

they gather it up;
when you open your hand,
they are satisfied with good things.
When you hide your face,
they are terrified;
when you take away their breath,
they die and return to the dust.
When you send your Spirit,
they are created,
and you renew the face of the ground.
May the glory of the Lord endure forever;
may the Lord rejoice in his works—
he who looks at the earth, and it trembles,
who touches the mountains, and they smoke.
I will sing to the Lord all my life;
I will sing praise to my God as long as I live.

COMMENT: A multiplicity of ancient Near Eastern texts address the creation of the world and of its wildlife (Keel and Schroer 2015). In many of them, and most significantly those cited here, we are taken back to a time before agriculture when a supreme deity decided to bring life to the cosmos. In Babylonian texts it is Enki who is the primeval creative force; he orders the world into being, names his creations, and allocates responsibilities to various gods. Enten and Enlil are responsible for bringing order to creation in the Mesopotamian 'Debate' text and similarly in the Hebrew bible, Yahweh allots the task of naming the animals to the newly created human, Adam (see HUMAN no. 3). The *Hymn to the Aten*, the most famous piece of literature to survive from the Amarna period of Egyptian history, is linked in many ways to earlier hymns of praise to gods such as Amun and Ptah. Egyptian hymns of creation tend to celebrate the polarity between the distant god and the proximate details of his creation, although the Aten hymn stresses the idea of creation being a manifestation of the Aten, the principal of all that is. In its turn, Psalm 104 has regularly been interpreted in this tradition and all living things – but especially those on dry land – are entrusted to the nurture of the creator god Yahweh. In both the Amarna hymn and Psalm 104 the dangers posed to humans by nature, including wild animals, are marginalised to the point of invisibility: the texts stress the joy of life under the protection of a caring creator god.

8. New kinds of animal

Ovid Metamorphoses II.367–80, V.451–61, XIV.573–80

a) Cynus becomes the swan

Cynus, the son of Stheneleia, was present at this terrible event [the transformation of Phaethon's sisters]; though related by blood to Phaethon, he was even closer in friendship. Abandoning his kingdom – for he ruled the people and great cities of Luguria – Cynus filled the green banks of the river Eridanus with his mourning, and the wood where Phaethon's sisters had become trees. His voice lost its strength and became shrill; white feathers replaced his hair; his neck stretched out long from his breast, and a web joined his fingers as they turned red. Wings clothed his sides, and his mouth became a blunt beak. Cynus became a new kind of bird, and put no trust in the high heavens

of Jupiter, as though remembering the lightning which he so unjustly sent [to kill Phaethon]; instead he sought the marsh and the spreading lake, and in his hatred of fire chose the water as his home, the element most inimical to fire.

b) Ascalabotes becomes the gecko (stellio)

While Ceres was drinking the cup she had been given, a bold and coarse-featured boy came to stand before her and mocked her, calling her greedy. Enraged, the goddess threw the remains of her drink over him as he spoke, scattering him with liquid and barley meal. Spots arose on his face, and legs took the place of his arms; a tail was added to his altered limbs. He shrank in size until he was smaller than a tiny lizard, becoming incapable of harm. Ceres marvelled amid her tears and reached to touch this strange creature, but he fled the old woman and darted into the shadows. The *stellio* now has a name appropriate to its colouring, for its body is starred with variegated spots.

c) Ardea becomes the heron

Turnus fell, and so too fell Ardea, a city famed for its strength while Turnus was alive. But after the invaders' swords had razed it, and its buildings lay beneath warm ashes, then from the heart of the ruins a bird sprang up, first seen at that moment, shaking off the cinders from its flapping wings. All aspects of its appearance, its mournful cry, its thinness and its pallor, were appropriate to a captured city, and it retained the name of the ruined town; and now the *ardea* beats its own head with its wings in lamentation.

COMMENT: Creation stories of the Near Eastern type do exist in classical literature, though they are rarely very detailed about the creation of animals: Diodorus, for instance, begins his *Bibliothēke* with the creation of the world, but gives only a short account of the creation of land and sea, followed by the spontaneous generation of animals which live on land, in the sea and in the air (Diod. I.7.3–5), while Plato preserves the myth of Epimetheus giving each newly created animal its characteristic qualities (*Prot.* 320c–322a). But an entirely opposite set of ideas about the origin of birds and animals co-existed with such stories, in the many aetiological tales of how certain animals came into being by transformation from humans. Ovid's *Metamorphoses* is the most significant compendium of such stories, but Ovid drew on an extensive Hellenistic literary tradition which attributed a human origin to many birds and animals; indeed one of his predecessors, Boios (or Boio) wrote an *Ornithogonia* (*On the origin of birds*), which claimed that all birds were created by metamorphosis from humans, and supplied a multiplicity of transformation-stories to account for all avian species (Forbes Irving 1990: 33–6). Ovid emphasises that when the transformation from human to animal takes place a new creature is created, one which did not previously exist, and the underlying concept is thus not of a single unitary creation event, but a world into which birds and animals come piecemeal at different times; some are mythological, but others, like the heron above, are set in proto-historical time.

The aetiological stories draw explicit parallels between human and animal behaviour, explaining an animal's characteristic actions or appearance as a continuation of their emotions or concerns while human: so, for instance, Aesacus tried to kill himself by throwing himself into the sea, and when transformed into a *mergus* (diver) he repeatedly dives beneath the waves, and Perdix, who was pushed from a roof, became the partridge which flutters along the ground because it fears heights (*Met.* XI.751–95, VIII.236–59; see Myers 1994: 32–40). In this way the world of animals recapitulates the world of humans, and animal behaviour is completely anthropomorphised.

Bibliography

- B. Allen, *Animals in Religion. Devotion, Symbol and Ritual* (London 2016).
- J. Black, G. Cunningham, E. Robson and G. Zólyomi, *The Literature of Ancient Sumer* (Oxford 2004).
- M. Blanchard-Lemée, M. Ennaïffer, H. Slim and L. Slim (trans. K.D. Whitehead), *Mosaics of Roman Africa: floor mosaics from Tunisia* (London 1996).
- S. Byl, *Recherches sur les grands traités biologique d'Aristote: sources écrites et préjugés* (Brussels 1980).
- M. Civil, 'The home of the fish. A new Sumerian literary composition', *Iraq* 23.2 (1961), 154–75.
- M.E. Cohen, *An English to Akkadian Companion to the Assyrian Dictionaries* (Bethesda 2011).
- B.J. Collins, 'Animals in Hittite literature', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 237–50.
- M. Douglas, *Purity and Danger: an analysis of concepts of pollution and taboo* (London 1966).
- I. Finkel, *The Ark Before Noah. Decoding the Story of the Flood* (London 2014).
- P.M.C. Forbes Irving, *Metamorphosis in Greek Myths* (Oxford 1990).
- B.J. Foster, 'Animals in Mesopotamian literature', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 271–306.
- R.K. French, *Ancient Natural History: histories of nature* (London and New York 1994).
- S. Gibson, *Animal, Vegetable, Mineral? How Eighteenth-Century Science Disrupted the Natural Order* (Oxford 2016).
- I.S. Gilhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
- O. Goldwasser, *Prophets, Lovers and Giraffes: Wor(l)d Classification in Ancient Egypt* (Wiesbaden 2002).
- J.J. Hall, 'The classification of birds, in Aristotle and early modern naturalists', *Journal of the History of Science* 29 (1991), 111–51, 223–43.
- O. Keel and S. Schroer, *Creation. Biblical Theologies in the Context of the Ancient Near East* (Winona Lake 2015).
- S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
- W.G. Lambert, 'The Sultantepe Tablets IX: the Birdcall Text', *Anatolian Studies* 20 (1970), 111–17.
- M. Lichtheim, *Ancient Egyptian Literature. The New Kingdom* (Berkeley 1976).
- E. Lytle, 'Fish lists in the wilderness: the social and economic history of a Boeotian price decree', *Hesperia* 79 (2010), 253–303.
- P.G.P. Meyboom, 'I mosaici pompeiani con figure di pesci', *MNIR* 39 (1977), 49–93.
- J. Moskala, *The Laws of Clean and Unclean Animals in Leviticus 11: their nature, theology and rationale* (Berrien Springs 2000).
- K.S. Myers, *Ovid's Causes: cosmogony and aetiology in the Metamorphoses* (Ann Arbor 1994).
- J. Nollé, 'Boars, bears and bugs: farming in Asia Minor and the protection of men, animals and crops', in S. Mitchell and C. Katsari (eds), *Patterns in the Economy of Roman Asia Minor* (Swansea 2005), 53–82.
- S. Quirke, *Exploring Egyptian Religion* (London 2015).
- D.S. Reese, 'Fish: evidence from specimens, mosaics, wall paintings and Roman authors', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 274–91.
- G. Riley, *Food in Art* (London 2015).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- H.L.J. Vanstiphout, 'The Disputation between Summer and Winter', in W.W. Hallo and K. Lawson Younger (eds), *The Context of Scripture. Volume 1* (Leiden 2003), 584–8.
- N. Veldhuis, *Religion, Literature and Scholarship: the Sumerian composition 'Nanše and the Birds', with a catalogue of Sumerian bird names* (Leiden 2004).
- A. Zucker, *Les classes zoologiques en Grèce antique d'Homère à Aelian Aix-en-Provence* (2005).

2

DOMESTIC ANIMALS

Mammals

OX

As early as 12,500 BCE, evidence suggests that a special relationship had developed between bovines and humans: at Tushka in Nubia, the horn-cores of wild cattle, employed as grave markers, were discovered in three human burials. Cattle are believed to have been introduced into Egypt either from the Near East and the Levant, or else are believed to have developed from the indigenous aurochs (*Bos primigenius*) of North Africa. Cattle domestication in Anatolia and Iran c. 6200 BCE supports the former argument, although excavations at early Holocene sites in Egypt's Western Desert support the view that indigenous cattle may have been present in the western Sahara as early as 8000 BCE. Nonetheless, the earliest undisputed evidence for domesticated cattle in Egypt is from Merimde and the Fayoum c. 5000 BCE. Several sites in Mesopotamia provide evidence that by 4500 BCE distinct types of cattle had appeared, including zebu and long-horned and short-horned cows and bulls. By the early third millennium BCE, artistic evidence shows cattle being employed in agriculture as well as being raised for meat and milk.

The sources collected here show both continuities between cultures, and some striking contrasts, the most fundamental of which is the purpose for which cattle were kept. In Egypt and the Near East cattle were raised, often in very large herds, for milk (see no. 3) and, to a lesser extent, meat (see no. 6): a grazing strategy developed which mixed a system of penned animal-raising and range herding, and evidence suggests that across Egypt and the Near East large numbers of cattle were reared as a careful response to the region's environmental uncertainties. In the islands of Greece and the Italian peninsula, however, extensive grasslands were limited, so while cattle contributed many products for human use, including leather, horn and tallow, meat and milk were of much lesser importance. Instead oxen were the main motive force in agriculture and heavy transport, and the most basic necessity of the farm (Hesiod, *Works and Days* 405; see WORKING ANIMALS). In all ancient cultures, however, cattle functioned as a signifier and measure of wealth, prompting comparisons with modern African herding cultures (MacInerney 2010), and great attention was devoted to their welfare at all periods. Names for oxen are known from Sumer, Egypt, Minoan Crete and Rome, attesting to their individualised status.

The specific Near Eastern terms for cattle (Hebrew *bāqār*; Akkadian *buqāru*; Egyptian *ḥmw*, *mmnt*, *nfrt*, *ḥtmw*) are sometimes difficult to match with their English counterparts (Watanabe 2002: 57–8), but the animals were generally classified in ways still familiar to us (Velten 2007: 9):

bulls (masculine, adult, used for breeding), cows (feminine, after first calf), bullocks (young bulls, especially castrated youths, often used for beef production), heifers (young cows, before calving), calves (infants below a year old) and oxen (castrated males used as a source of power). Multiple breeds of cattle further complicate our understanding of the ancient lexicography. In Egypt, for instance, long-horned bovines were known as *iw3* and short-horned types were *wndw*, while hornless cattle were termed *hry s3* (Osborn and Osbornova 1988: 194–6; Brewer, Redford and Redford 1994: 82–5; Mastropaolo 2013). Ancient Near Eastern peoples became skilled at bovine husbandry and purposefully developed special breeds of cattle to suit the various tasks and natural habitation of the lands.

The appreciation of the cow in classical cultures can be gauged from the fame attaching to Myron's celebrated sculpture of a heifer, once dedicated on the Athenian Acropolis and later taken to Rome (Plin. *NH* XXXIV.57). Supposedly so lifelike that it deceived men and beasts alike, the statue is the subject of more than thirty epigrams attesting to its artistry and beauty (*GA* IX.713–42, 793–8). Cattle were high-status animals in the Mediterranean, undoubtedly because they were not well suited to the climate, needing extensive well-watered grazing, and hence served as an indication of wealth (MacInerney 2010: 227–30). Breeds of cattle were not recognised as such, but certain areas such as Northern Greece and the Po Valley specialised in cattle-raising; the vast red cows of Epirus, described by Aristotle (*HA* 522b 16–21), were considered to be the finest.

Zooarchaeological evidence tells us that most cattle in the Roman world lived for more than three years and many for five or more, indicating that they were not seen primarily as food animals (MacKinnon 2004: 93). In Greece beef was rarely eaten, and almost all as part of religious ritual; across the Roman empire the evidence is more ambiguous. There are very few preserved recipes for beef in Roman culinary texts, far fewer than for pork, but studies of the military diet in the provinces suggests that it was more commonly consumed in the northern and western regions (King 1999). Nevertheless, in the ancient Mediterranean as a whole, people were more likely to admire and mythologise the cow than to see it as a utilitarian animal.

1. Bovine maxims

Sumerian proverbs, 2.89 (Alster 1997 (1): 63 and Kramer 1956: 296)

Like a grazing wild cow,
Your nose is your dancer.

You are like a bull [who] does not know how to turn back.

Like a bull to your stall,
Like a sheep to your fold.

He is a man deceived like an ox escaping from the threshing floor.

You wander about the street
Like an ox of a nobleman.

Like a fallen bull I cannot rise up from your wall.

Like a barren cow you keep on seeking your calf which does not exist.

b) Akkadian verses (after Foster 1996: 127, 343)

Arousal is coming upon me like a wild bull,
It keeps springing at me like a dog,
Like a lion it is fierce in coming,
Like a wolf it is full of fury.

When you get away, you are a wild bull,
When they catch you, you fawn like a dog.

c) Hebrew bible, Proverbs 14.4

Where there are no cattle, the feeding trough is empty, but the strength of an ox produces plentiful harvests.

Hebrew bible, Job 18.3

Why are we regarded as cattle and considered stupid in your sight?

d) Egyptian sayings (Janssen and Janssen 1989: 31; Teeter 2002: 261)

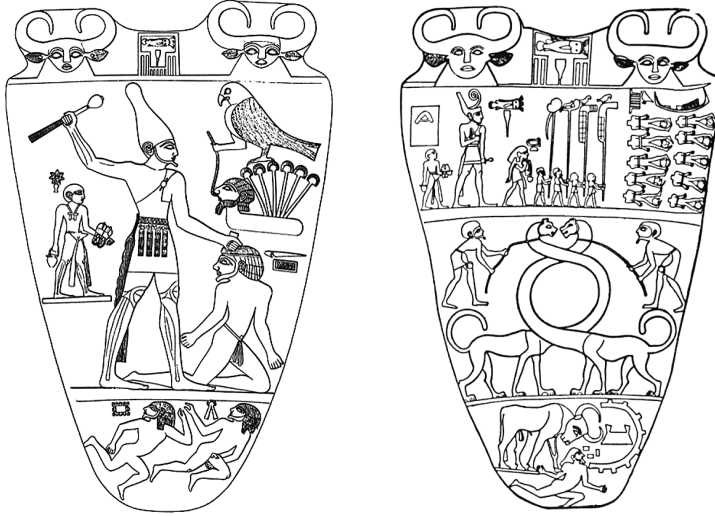
The cow will plough on the return of the year; it begins to listen to the cowherd, it can all but speak.

I am a stupid man and spend all my time following after my own dictate like an ox after grass.

COMMENT: Given the ubiquitous presence of cattle throughout the Near East, it is not surprising to find them entering into a myriad of popular sayings and motifs. The wild bull was a particular favourite of Sumerian poets and the animal plays an important role in the Gilgamesh epic. The domestic bull also provided rich imagery for individuals across the Near East: its bellowing was likened to the voice of rulers and the sturdiness of the animal was a symbol of obvious strength: 'Gilgamesh stood on the great earth like a bull'; 'the hero (Ninurta) whom I lean on like a bull.' The bull is also used as a metaphor for highly charged sexuality and aggression. The cow, in contrast, plays less of a role in Near Eastern literature (see below no. 6 for a notable exception) but is a fitting symbol for tenderness, nurture and warmth. The ox tends to play the role of the stupid if industrious worker and was clearly a figure of derision as much as admiration (see also HORSE no. 1).

2. Bulls and kings

*The Narmer Palette, from Hierakonpolis, Egypt, I Dynasty,
c. 3,200 BCE (Cairo, Egyptian Museum CG 14716)*



COMMENT: In this iconic image of Egyptian kingship the pharaoh Narmer is shown twice in human form. On one side of the palette he wears the Upper Egyptian White Crown as he grasps an inert foe by the hair and prepares to crush his skull. He wears a simple kilt to which is fastened, on an ornamented belt, a ritual object: a bull's tail, which hangs low at the back of Narmer's legs. The strength of the wild bull, its indomitability and its sexual vigour, was symbolically transferred into the king through his sporting of the animal's tail. On the other side of the palette Narmer is shown in victorious procession wearing the red crown of Lower Egypt together with the bull's tail belt. In the lowest register he appears again, this time in the guise of a bull which is shown goring to death a naked enemy; the image echoes that of Narmer striking a death blow to a prisoner on the reverse. Both sides of the palette are decorated with the bovine heads of the goddess Hathor.

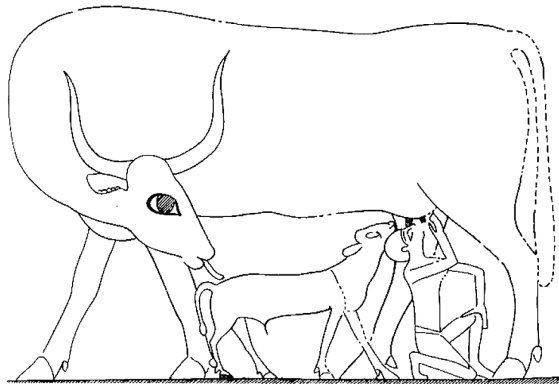
The bull (Egyptian *k3, sm3* 'wild bull') held a special place in Egyptian religious thought and practice. The king was saluted by a variety of titles incorporating the bull image: in the V Dynasty, for instance, King Unas was addressed as 'the Bull of Heaven', while in Dynasty XVIII Akhenaten was hailed as 'Strong Bull Lofty of Plumes', later changed to 'Strong Bull Beloved of Aten' (Rice 1998: 145). Pharaohs were the offspring of divine bovines and were especially close to the cow-goddess Hathor who is often shown suckling royal figures with her udder (Sharpes 2006: 65). Attestation of the importance of the Apis bull, an animal directly connected to the royal cult, is found on the II Dynasty Palermo stone which testifies that the Apis was a personification of the god Ptah. Upon its death, a new bull would be selected among many to replace this most exceptional of animals, although it had to meet certain physical criteria – a saddle-marked back and a coloured patch on its tongue and forehead. The Mnevis bull was sacred to Re of Heliopolis and the Buchis bull was a manifestation of Montu of Armant (Velten 2007: 34–6). Bull worship also occurred throughout the Levant and is a noticeable feature in the Hebrew bible (Exodus 32, 1 Kings 12).

Royal epithets also use bull imagery to great effect: King Šulgi is described as 'a wild bull of extraordinary vigour' and 'born to a great wild bull'. The king sees himself in the same light: 'I

am like a rampant wild bull, born to be a great wild bull, adorned with splendid curved horns' (cited in Watanabe 2002: 60). This ruler-bull connection stayed active into Neo-Assyrian and Neo-Babylonian times. Finkel and Reade suggest that the 'hieroglyphic' bull figures represented in glazed bricks in temples and palaces, such as those found at Khorsabad, represented the king and in this respect the bull-image could be interchangeable with that of the lion (Finkel and Reade 1996: 249–50). In Iran the Achaemenid monarch routinely used bull imagery to augment his status and, indeed, he could also be described as looking like 'a bull in his anger' (LXX Esther 15.5; Llewellyn-Jones 2013: 70).

3. Cow as foster mother

Wall painting from the tomb-chapel of Baket III at Beni Hasan, XII Dynasty (after Houlihan 2001: 27)



COMMENT: While there is no doubt that the most basic benefit of cattle domestication was experienced through their ability to work agricultural land, the ready availability of milk must not be forgotten. Indo-European, Middle Eastern and African societies adopted the drinking of cow's milk early on in history, so much so that its origins and the profundity it signified in ancient cultures are today all too easily overlooked. The act of drinking cow's milk can be regarded as a bonding experience between human and animal, and in Egypt particularly the drinking of milk straight from the udder was a popular and important act, so much so that the pharaoh himself was often shown nursing on the teats of the cow-goddess Hathor (Gordon and Shwabe 2004: 41–2). Of course, it is important to recognise that the theological complexities of the pharaoh–Hathor relationship were played out in practice in farmyards and grazing pastures as humans fed at cows' udders. The image from the Beni Hasan tomb shows a young boy sharing the cow's teats with her calf which, in a standard image of affection, is groomed by its mother's tongue. (The interspecies dependency works in reverse too: Hurn (2012: 8–10) explores the ethnographic evidence for women suckling piglets at their breasts.)

Cattle were not initially a major source of milk for humans (see GOAT); in arid areas cows produce just enough milk to feed their calves, so milk production is the result of cattle having access to the grasses needed to produce good milk. This is first evidenced in the fourth millennium BCE in Egypt and Mesopotamia and milking scenes are known across the Near East throughout antiquity. Milk eventually became a staple requirement, and excavations at the Egyptian New Kingdom city of Amarna have unearthed a series of sticks that are thought to be

a muzzle that prevented a calf from drinking its mother's milk. Similar finds elsewhere suggest that the muzzling was a common means of preserving some of the cows' milk for human use (Janssen and Janssen 1989: 27). In ancient Israel, milk was closely linked to rituals of hospitality and hosts would routinely offer guests a cup of fresh milk (Genesis 18.8; see also GOAT). Milk also appears in a series of biblical metaphors: the bride-figure in Song of Songs has 'milk under her tongue' (4.11) and her groom's eyes are 'washed in milk' (5.12). The elegant princes of Jerusalem are described as being 'brighter than snow and whiter than milk' (Lamentations 4.7), while at the start of his life, Job was said to have stood on a path which was drenched in milk – a symbol of abundance and the grace of Yahweh (Job 29.6). Israel itself was seen as a 'land flowing with milk and honey' (Exodus 3.8, 3.17, etc.) where the 'hills . . . flow with milk' (Joel 3.18) and Isaiah (60.16) prophecies that Yahweh's faithful will 'drink the milk of nations'.

4. Cattle as wealth

a) Hebrew bible, Job 1.1–3, 13–17 (see also Genesis 20.14, 24.35)

In the land of Uz there lived a man whose name was Job. This man was blameless and upright; he feared God and shunned evil. He had seven sons and three daughters, and he owned seven thousand sheep, three thousand camels, five hundred pairs of oxen and five hundred donkeys, and had a large number of servants. He was the greatest man among all the people of the East . . .

One day when Job's sons and daughters were feasting and drinking wine at the oldest brother's house, a messenger came to Job and said, 'The oxen were ploughing and the donkeys were grazing nearby, and the Sabeans attacked and made off with them. They put the servants to the sword, and I am the only one who has escaped to tell you!'

While he was still speaking, another messenger came and said, 'The fire of God fell from the heavens and burned up the sheep and the servants, and I am the only one who has escaped to tell you!'

While he was still speaking, another messenger came and said, 'The Chaldeans formed three raiding parties and swept down on your camels and made off with them. They put the servants to the sword, and I am the only one who has escaped to tell you!'

b) Annals of Tiglath-Pileser III, 732 BCE (Halla 1997: 287)

As for Samsi, the queen of the land of Arabia, at Mount Saqurri I sle[w 9,400] of her warriors. I seized 1,000 people, 30,000 camels, 20,000 cattle [. . .], 5,000 (leather pouches) of all kinds of spices [. . .] seats of her gods, [arms (and) staffs of her goddesses,] and her property. And she, in order to save her life, [. . . to] a desert, an arid place, like an onager [made off]. [The rest of her possessions] (and) her [ten]ts, her people's watchmen, within her camp [I set on fire].

COMMENT: Throughout antiquity cattle were important indicators of wealth and status; in fact, Job's wealth is described entirely in terms of his servants and cattle (cf. Genesis 12.16, 26.14, 30.43, 46.32, 1 Samuel 25.2). The sheer number of oxen (for ploughing) and donkeys (for carrying farmed produce) indicates that Job had forms of wealth besides animals and, as Clines (1989: 14) notes, 'the book as a whole shows Job as a settled agriculturalist with princely rule in a city'. The number of oxen owned by Job is, nonetheless, realistic for a wealthy man. Egyptian account records show that 835 long-horned cattle and 220 hornless cattle belonged to one estate

owner, besides the 760 donkeys, 974 sheep and 2,234 goats he owned (Brewer 2002: 445). Harris Papyrus I, compiled in the New Kingdom reign of Ramesses IV, documents 421,362 large and small (i.e., sheep and goats) cattle in the Temple of Amun at Thebes and 45,544 belonging to the Temple of Heliopolis.

Of course cattle rustling was a serious matter for any owner of livestock and raids on farmsteads and in the open countryside were common. The author of Job uses the image of the capture of Job's herds and flocks to set in motion the story of his decline and fall (ultimately, the reader learns that this is a test from Yahweh). Assyrian inscriptional evidence (b) shows that conquering kings could also readily turn into cattle-rustlers. Most cattle were permitted to graze in open fields and to make sure that in the open range cattle would not become mixed with those from the herd of another owner, branding and other forms of identification-markings (such as etching or marking the horns) were utilised. The XX Dynasty Varzy Papyrus highlights the frequency of cattle rustling and the problem of re-branding stolen cattle; therefore, tethering cattle with ropes fixed to pierced stones or trees was an unavoidable necessity. This meant that the cattle's diet had to be supplemented with nutrients; they appear to have been hand fed with fresh greens and bread dough which provided important minerals and proteins. The Egyptians also developed a number of techniques for rendering cattle easier to handle: unwanted horn growth was controlled by burning or scraping off sprouting horns and the popular late period story *The Lion in Search of Man* also tells of nose-piercing: 'an ox and a cow, whose horns were clipped, whose noses were pierced, and whose heads were roped.'

5. Oxen and the law

a) Laws of Hammurabi, Babylon, c. 1772 BCE

241. If anyone impresses an ox for forced labour, he shall pay one-third of a mina in money.
242. If anyone hires oxen for a year, he shall pay four *gur* of corn for plough-oxen.
243. As rent of herd cattle he shall pay three *gur* of corn to the owner.
244. If anyone hires an ox or an ass, and a lion kills it in the field, the loss is upon its owner.
245. If anyone hires oxen, and kills them by bad treatment or blows, he shall compensate the owner, oxen for oxen.
246. If a man hires an ox, and he break its leg or cuts the ligament of its neck, he shall compensate the owner with ox for ox.
247. If anyone hires an ox, and puts out its eye, he shall pay the owner one-half of its value.
248. If anyone hires an ox, and breaks off a horn, or cuts off its tail, or hurts its muzzle, he shall pay one-fourth of its value in money.
249. If anyone hires an ox, and [a] god strikes it so that it dies, the man who hired it shall swear by God and be considered guiltless.
250. If while an ox is passing on the street (market) someone pushes it, and kills it, the owner can set up no claim in the suit (against the hirer).
251. If an ox be a goring ox, and it is shown that he is a gorer, and he does not bind his horns, or fasten the ox up, and the ox gores a free-born man and kills him, the owner shall pay one-half a mina in money.

b) Hebrew bible, Exodus 21.28–36

If an ox gores a man or woman to death, the ox is to be stoned to death, and its meat must not be eaten. But the owner of the ox will not be held responsible. If, however, the ox has had the habit of goring and the owner has been warned but has not kept it penned up and it kills a man or woman, the ox is to be stoned and its owner also is to be put to death. However, if payment is demanded, the owner may redeem his life by the payment of whatever is demanded. This law also applies if the ox gores a son or daughter. If the ox gores a male or female slave, the owner must pay thirty shekels of silver to the master of the slave, and the ox is to be stoned to death.

If anyone uncovers a pit or digs one and fails to cover it and an ox or a donkey falls into it, the one who opened the pit must pay the owner for the loss and take the dead animal in exchange.

If anyone's ox injures someone else's ox and it dies, the two parties are to sell the live one and divide both the money and the dead animal equally. However, if it was known that the ox had the habit of goring, yet the owner did not keep it penned up, the owner must pay, animal for animal, and take the dead animal in exchange.

c) Laws of Eshnunna, Babylonia, c. 1930 BCE

53. If an ox gores another ox and thus causes its death, the two ox-owners shall divide the value of the living ox and the carcass of the dead ox.
54. If an ox is a gorer and the ward authorities so notify its owner, but he fails to keep his ox in check and it gores a man and thus causes his death, the owner of the ox shall weigh and deliver 40 shekels of silver.
55. If it gores a slave and thus causes his death he shall weigh and deliver 15 shekels of silver.

COMMENT: Of the 282 of Hammurabi's concisely composed laws, no less than twenty-nine are given over to crimes against oxen, to the hazards of owning oxen and rules governing the hiring of oxen and their subsequent upkeep and health (Velten 2007: 23). Remarkably, as Wright (2009) has stressed, Hammurabi's laws regarding oxen bear considerable similarities to the Laws of Eshnunna and to the law code found in the Hebrew book of Exodus. But what stands out the most is the fact that while oxen-laws exist in several ancient law courts, there is not one single case of the issue of an ox-goring in the thousands of legal cases which have survived from Near Eastern antiquity (Finkelstein 1981). While there can be little doubt that oxen can be powerful and sometimes dangerous animals if goaded or in pain, they are by and large docile animals. This suggests that the ox-goring law codes were more academic in nature than practical solutions to real-life problems; they allowed certain principles to be voiced even though the problems they focused on were not regularly experienced. The ox-goring laws are a reminder for us to approach our literary sources for the lived experiences of animals in antiquity with caution.

6. Cows and calves

a) Incantation for a woman in labour in the form of an Akkadian lyric poem: 'A Cow of Sin' (after Veldhuis 1991)

[Text a]

Incantation: there was a cow of Sin, her name was Geme-Sin.
With ornaments decorated, tempting of shape she was.
Sin saw her and fell in love with her.
The brilliance (?) of Sin he laid (. . . ?) upon her.
He appointed her at the head of the herd, the herdsmen followed her.
In the lushest grasses she grazed, at the head of the abundant well they watered her.
Hidden from the herd boys, not seen by the herdsmen, the wild bull mounted the cow,
he lifted her tail (?).
When her days came to an end, her months were finished, the cow trembled and terrified her herdsmen. His head was bowed, all the herd boys lamented with him.
At her crying, at her screaming in labour, Ninnāru was downcast.
Sin heard her screaming in heaven and lifted high his hand.
Two *Lamassus* [winged human-headed bulls] descended from heaven. One of them carried 'oil from the jar', the other brought down 'water of labour'. With 'oil from the jar' she touched her forehead, with 'water of labour' she sprinkled her whole body.
Once again she touched her forehead with 'oil from the jar', with 'water of labour' she sprinkled her whole body.
When she touched for the third time, the calf fell down on the ground like a gazelle's young.
'Milk-calf' she called the calf.
Just as Geme-Sin gave birth normally, may also this girl in labour give birth.
Let the midwife not tarry, let the pregnant one be all right.

[Text b]

Incantation: A Cow of Sin was Geme-Sin, great was her stature and attractive her shape.
Sin saw her and fell in love with her.
(. . . ?).
He appointed her at the head of the herd; the cows followed her.
He pastured her in the lushest grasses, at the abundance of the well [he watered her].
Hidden from the herdsmen, not noticed by the herd boys, the wild bull mounted the cow.
When her months were finished, her days [came to an end], the cow squatted and was taken with labour pains. The herdsmen . . . all the herd boys lamented her. (. he bore it, and the herd boy . . . ?) At her [crying], [at] her screaming in labour, they heard her screaming in heaven.
Two *Lamassus* descended from heaven.
One of them she carried 'water of well-being'.
. . . the cow . . . he (her calf) fell on the field . . .
. . . just as Geme-Sin may be she all right . . .
. . .
. . . may she be alright.

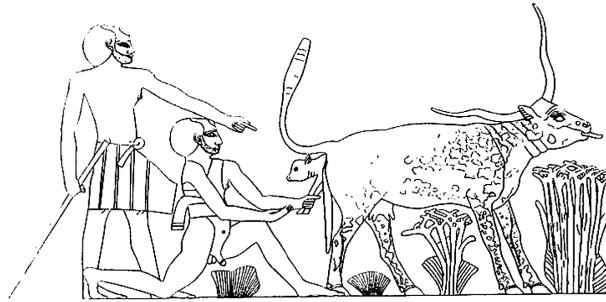
[Text c]

Gi-Sin, slave-girl of Sin has trouble in childbirth. The child is stuck, the child is stuck, to bring life to an end. The bolt is drawn, the door is secured against the suckling babe. Sin saw her and pastured her. Among the lushest grasses he always pastured her, in the meadows . . . he always watered her.
The wild bull mounted the cow. When her days were fulfilled, her months [finished] the cow bent down and was taken with labour pains. . . .

[Text Ms. A III 36–IV 1]

Incantation: Narundi, Naḥundi nanamgišir.
There was a cow of Sin, Geme-Sin by name.
At her crying, at her screaming in labour
Nannāru-Sin heard her screaming.
‘Who is it Narundi, who is it Naḥundi?’
‘A cow, oh lord, she has trouble in delivery!
Oh lord, sprinkle water from your Banduddu-bucket over her!’
Let the face of the cow Egi-Sin be ‘opened’.
May he come out like a snake, may he glide out like a little snake.
May he not draw back his cheek, just as someone who falls down from a wall. . .
Its ritual: dust from the crossroads, dust from the first threshold
Dust from the upper and lower box
Dust from the box of the door: a very big stem of reed
You must cut off top and bottom.
The above mentioned kinds of dust you will throw into oil, you will recite over it this incantation seven times. The big stem of reed you will fill and her bulging belly you will rub from top to bottom.
Incantation: The big cow of Sin, of Sin I am.
I am pregnant and I am butting all the time.
With my horns I root up the soil.
With my tail I whirl up dust clouds.
At the quay of death the ship is held fast.
. . . Ea, lord of incantation!
[At the quay of death] let them loosen the ship,
[At the quay of death let] them untie the cargo boat
[. . .].
Let the child come out rapidly and see the light of the sun!
End of the incantation.

b) Egyptian wall-painting, V Dynasty from Saqqara



***c) Sumerian and Akkadian glossary, XIIIth Tablet of the HAR.ra = ħubullû,
Old Babylonian period (after Oppenheim and Hartman 1945)***

calf (male)
suckling calf [. . .] milk
calf which feeds milk
calf which drinks milk
calf which sips (?) milk
restive (then) playful (calf)
young calf frisky (calf)
strong calf
tra[ined calf]

COMMENT: ‘The Cow of Sin’ is a poetic Akkadian incantation for a woman in childbirth. It was used to assist a woman during her labour and was recited by physicians in order to ease and induce the birth. The poem contains a small mythological narrative (about 20 lines) about the moon god and his affection for a cow, Geme-Sin. The text stretches back to the Old Babylonian period, and may even be an Ur III period composition, but Scurlock (2013: 130) notes that it was, in essence, still in circulation in the ninth century CE, as reported by the Arab scholar Ibn Qutayba: ‘Jesus passed by a cow which was calving in great distress. “Oh Word of God”, the cow said, “Pray that God may deliver me.” Jesus prayed, “O Creator of the soul from the soul, begetter of the soul from the soul, deliver her.” The cow dropped its young.’

The travail of the cow in labour is well depicted. This was, naturally, a frightening and threatening experience for both mother and calf and Geme-Sin bellows out for help. A series of Egyptian wall-reliefs (b) show cows experiencing difficult labour. When birth is going well, cows lie down, but the fact that this cow stands is indicative of her distress; her unfurled tongue indicates that she vocalises her agony. The regular occurrence of these distressing scenes suggests that herdsmen were familiar with difficult labours and that they knew how to assist to best advantage. In this example a herdsman grasps the emerging calf by its forelegs and pulls her out of the cow’s body; behind him a colleague extends a finger in a magical-ritual gesture while he recites an incantation (recorded in a hieroglyphic text): ‘Loosen greatly this calf in its constriction’ (Evans 2010: 171).

The obvious fondness shown by Sin towards his cow Geme-Sin, or of the herdsmen towards their suffering cow, are indicative of the close bonds which could develop between men and their cattle. Cows often received individual names, and the Egyptian corpus of cattle onomastica is especially impressive: ‘Fine Inundation’, ‘Pigeon’ and ‘Good Advice’ are representative, although

names could even be bestowed upon whole herds: 'Ramses-Conqueror-of-the-Meshwesh' or 'At-the-Water-of-the-Sun' (Janssen and Janssen 1989: 30–1).

7. The fattened calf

a) Hebrew bible, Proverbs 15.17

Better a small serving of vegetables with love than a fattened calf with hatred.

Hebrew bible, Amos 4.1–3, 6.4–7

Hear this word, you cows of Bashan on Mount Samaria,
you women who oppress the poor and crush the needy
and say to your husbands, 'Bring us some drinks!'
The Sovereign Lord has sworn by his holiness:
'The time will surely come
when you will be taken away with hooks,
the last of you with fishhooks.
You will each go straight out
through breaches in the wall,
and you will be cast out toward Harmon,'
declares the Lord. . .
You lie on beds adorned with ivory
and lounge on your couches.
You dine on choice lambs
and fattened calves.
You strum away on your harps like David
and improvise on musical instruments.
You drink wine by the bowlful
and use the finest lotions,
but you do not grieve over the ruin of Joseph.
Therefore you will be among the first to go into exile;
your feasting and lounging will end.

Hebrew bible, 1 Samuel 28.24

The woman had a fattened calf at the house, which she butchered at once. She took some flour, kneaded it and baked bread without yeast. Then she set it before Saul and his men, and they ate. That same night they got up and left.

b) New Testament, Luke 15.20–32

But while he was still a long way off, his father saw him and was filled with compassion for him; he ran to his son, threw his arms around him and kissed him.

The son said to him, 'Father, I have sinned against heaven and against you. I am no longer worthy to be called your son.'

But the father said to his servants, 'Quick! Bring the best robe and put it on him. Put a ring on his finger and sandals on his feet. Bring the fattened calf and kill it. Let's

have a feast and celebrate. For this son of mine was dead and is alive again; he was lost and is found.' So they began to celebrate.

Meanwhile, the older son was in the field. When he came near the house, he heard music and dancing. So he called one of the servants and asked him what was going on. 'Your brother has come,' he replied, 'and your father has killed the fattened calf because he has him back safe and sound.'

The older brother became angry and refused to go in. So his father went out and pleaded with him. But he answered his father, 'Look! All these years I've been slaving for you and never disobeyed your orders. Yet you never gave me even a young goat so I could celebrate with my friends. But when this son of yours who has squandered your property with prostitutes comes home, you kill the fattened calf for him!'

'My son,' the father said, 'you are always with me, and everything I have is yours. But we had to celebrate and be glad, because this brother of yours was dead and is alive again; he was lost and is found.'

COMMENT: Fat was greatly prized by ancient Near Eastern peoples; it is the second largest component of meat as well as being some of the most calorifically dense of foodstuffs. Egyptian evidence shows that cows and bulls could be force-fed to make them fat, and images of cattle so obese that they are unable to walk and need to be dragged on sledges are not unknown (Ikram 1995: 176 with references). Castrated bulls and bullocks tend to run to fat naturally and when forced to lead a sedentary life, their weight was therefore made up more of fat than muscle. When the Israelite prophet Amos calls the women of Samaria 'cows of Bashan' he is referring to their indolence and corpulence, for the fertile lands of Bashan in the north of Israel provided abundant fodder for cattle to graze upon and was the ideal spot for fattening animals (see also Ezekiel 39.18; Borowski 1998: 78).

Young calves (Hebrew *bēn bāqār*) with tender milk-nurtured flesh could also be force-fed before slaughter; they were considered a great delicacy and might be served with butter, fresh milk and baked goods (Genesis 18.6–9). Calves were expensive, costing as much as an adult donkey (Janssen and Janssen 1989: 30), and therefore a calf specially selected for fattening (Hebrew *'ēgel marbēq*) and slaughter was served at a meal that marked a very special occasion, such as a wedding or a family reunion or hosting a royal guest or some great dignitary. These young animals were also the choice animals for sacrifice (Leviticus 9.2, Numbers 7). When the fattened calf became part of the standard diet of the elite, Amos denounced the practice as ungodly (see also Amos 6.4).

8. Treatment for sick cattle

a) Kahun Veterinary Papyrus (after Griffith 1898: 13)

Treatment for the eyes (?) of a bull with the wind (cold ?).

If I see [a bull with] wind, he is with his eyes running, his forehead (wrinkled ?) the roots (gums ?) of his teeth red, his neck swollen (or raised ?): repeat the incantation for him. Let him be laid on his side, let him be sprinkled with cold water, let his eyes and his hoofs (?) and all his body be rubbed with gourds (?) or melons, let him be fumigated with gourds wait herdsman be soaked that it draws in soaking until it dissolves into water: let him be rubbed with gourds of cucumbers. You shall gash (?) him upon his nose and his tail, you shall say as to it, 'he that has a cut either dies with it or lives with it.' If he does not recover and he is wrinkled (?) under your fingers, and blinks (?) his eyes, you shall bandage his eyes with linen lighted with fire to stop the running.

Treatment for the eyes (?) of a bull with *ushau* in winter

If I see a bull with [*ushau*] in winter, and he is blinded (?) his two eyes are thick . . .
If I see a bull with *ushau* in winter from cold, since its arrival in (?) summer, his temples are wrinkled (?), his eyes running, his stomach groaning (?), he does not walk (?)
..... you all its body with as is done to one with a bruise (?).

b) Old Babylonian incantation against cattle disease
(after Hallo 1997: 246)

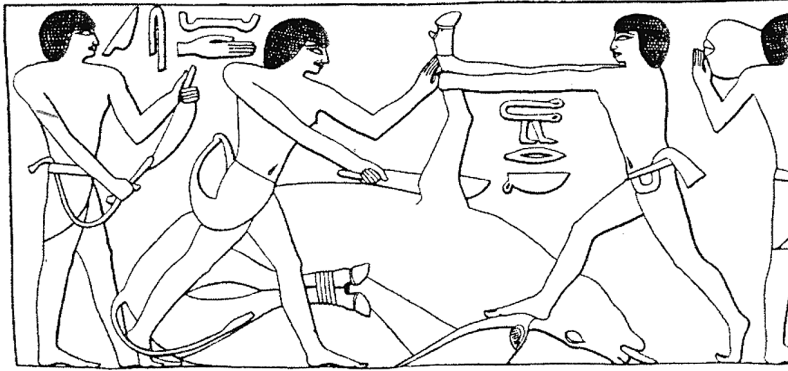
There was a whirl[wind] in the sky,
A fire was kindled,
And the 'peg' fell
On all the cattle.
It was infected with heat
The kids and the lambs
And also the small ones on the nurse's shoulder.
Address my mother Ningirim.
Let the face of the cattle be bright again,
Let Sumuqan rejoice,
Let the herbs rejoice,
Let the trail resound with merry bleating
(Then) I will most carefully apply lots of little sun disks to the seats of the great gods.
Incantation of [cattle and] sheep infected with the 'peg'.

COMMENT: The Kahun (or Lahun) Veterinary Papyrus is a Middle Kingdom text which explores the types of diseases commonly found in several different animal species, in this passage eye complaints found in a bull. It is one of the oldest medical papyri known from Egypt. Its early editors were quick to realise that the prognoses and treatments found in Egyptian veterinary texts for the most part were mainly transferred from human medicine, and Ghalioungui (1973: 138) proposed that therefore an Egyptian veterinarian must also have been a physician, recognising the influence of the study of animal anatomy in medical knowledge. Gordon and Schwabe (2004: 5) go further, suggesting that there is no evidence for a clear division between practitioners of human and veterinary medicine in Egypt before the Ptolemaic Period: 'in fact, the apparent absence of a word for veterinarian in ancient Egyptian implies . . . that the word (*swmw*) usually translated as "physician", may mean someone who treats people and animals.'

Alongside veterinary intervention, prayers, ritual acts and incantations were obvious tools in the cure of any animal ailments. The Babylonian incantation cited here (b) is aimed at preventing or curing cattle sickness – a costly and possibly devastating fate for any farmer or cattle herder. The disease is known, somewhat cryptically, as 'the peg', possibly constipation or some other form of bowel constriction. The disease is said to be heralded with bad omens – whirlwinds and fires – and to assuage it the incantations depend on evoking the aid of the deity Ningirim, the goddess of cattle, who will, through her care, 'Let the face of the cattle be bright again.'

9. Butchering and sacrifice

a) Old Kingdom scene of butchering (after Gordon and Schwabe 2004: 74, fig. 7.1)



b) Hebrew bible, 1 Kings 8.63

Solomon offered a sacrifice of fellowship offerings to the Lord: twenty-two thousand cattle and a hundred and twenty thousand sheep and goats. So the king and all the Israelites dedicated the temple of Yahweh,

c) Hebrew bible, 2 Chronicles 5.6

King Solomon and the entire assembly of Israel that had gathered about him were before the ark, sacrificing so many sheep and cattle that they could not be recorded or counted.

d) Hebrew bible, Isaiah 22.13

But see, there is joy and revelry, slaughtering of cattle and killing of sheep, eating of meat and drinking of wine! 'Let us eat and drink,' you say, 'for tomorrow we die!'

e) Hittite instructions for temple personnel (after Miller 2013: 265)

If you select at some point a selection (of the animals) and they drive them to the deities, your lords, the cowherds and the shepherds shall go along with the selection. And just as they were selected from the corral (and) from the pen, so they shall bring them in to the deities. Following the selection they shall not exchange them on the way. But if along the way some cowherd or shepherd commits fraud, and he exchanges a fattened cow or a fattened sheep, and he accepts payment for it, or he kills it and they consume it, and they replace it with an emaciated animal, and it becomes known, then it is a capital offence for you. They have taken the savory share of the deities themselves . . . [The herdsmen and shepherds will confess to the gods, saying:] 'may you, o deity, continually haunt us, along with our wives and our sons on account of your own share!'

COMMENT: Cattle of all sorts were sacrificed, and following sacrifice the victim became food for priests, temple personnel and for the general populace. Some bulls are depicted in Egyptian wall reliefs as extraordinarily obese with huge pendulous bellies; these seem to have been deliberately fattened and nurtured for sacrificial purposes and we should suppose that the flavour of their meat would have been better than that of range-fed cattle or of oxen toughened by hard physical labour. The Hebrew bible (1 Kings 4.23) makes this differentiation, noting that, 'Solomon's daily provisions were . . . ten head of stall-fed cattle, twenty of pasture-fed cattle and a hundred sheep and goats, as well as deer, gazelles, roebucks and choice fowl' – in other words, the king and his court ate the finest meat produced from hand-reared cattle.

Bulls were sacrificed in all ancient religious practices. The cost of breeding, feeding and raising a bull made it a valuable offering to the gods and only the finest bulls could be offered since sacrifices were regularly termed divine food (as (e), above, makes clear). In the Mesopotamian Atrahasis myth, the gods 'swarm like flies' around a sacrifice, driven there by hunger. Of course, sacrifice also served as a main source of meat for humans. Parts of sacrificial offerings were 'consumed' by the gods, but it was humans who ate the majority of the meat. Because of the cost of maintaining healthy cows and bulls (Lord 2010), sacrifices were about the only time when most people would have tasted beef. However, in Israel the ritual of burnt offerings called for bulls (although sheep or goats were acceptable too) and following the animal's slaughter, its carcass was drained of blood, flayed and dissected and all the pieces arranged on the altar to be consumed by fire (Anderson 1992) – only the animal's skin was left for the priest. There was no question of human worshippers enjoying a fresh cut of beef.

In Egypt, during sacrifice, as shown in (a) above, the bull's forelimb was always the first part to be removed and, more disturbingly to modern sensibilities, is often shown being carried away while the bull is still alive. Some scenes show numerous otherwise intact bulls each on its back with its one severed forelimb resting on its sternum. Haste was evidently considered important and a number of scenes show someone running off with one severed forelimb. In the Sixth Dynasty mastaba of Ankhmahor at Saqqara, the workers are continually told to hurry up. 'Put this foreleg on the offering table, and hurry.' 'Let me go with you. (There is) a hurry today' (Gordon and Schwabe 2004: 74–5). The reason for removing the leg first is linked to the notion of the reanimation of the dead in the Opening-of-the-Mouth ceremony: the leg is shaped like the *adze*, the ceremonial implement used to touch the mouth of the deceased (see further Gordon 2007).

10. Named oxen at Knossos

Knossos Tablets (series C), c. 1300 BCE

Ch 896

Ta-za-ro: one yoke of young working oxen, Aiolos and Kelainos.

Ch 897 + 7639

E-po-ro-jo: one yoke of oxen, Stomargos and Oinops

Ch 899

. . .] one yoke of oxen, [. . .]gos and Podargos.

Ch 900

. . .] one yoke of oxen, [. . .] and Xouthos.

Ch 1034

. . .] Aischros and Oi[. . .

Ch 5724 + 6005 + fr.

...] one yoke of oxen, [...] and Enops.

Ch 5728

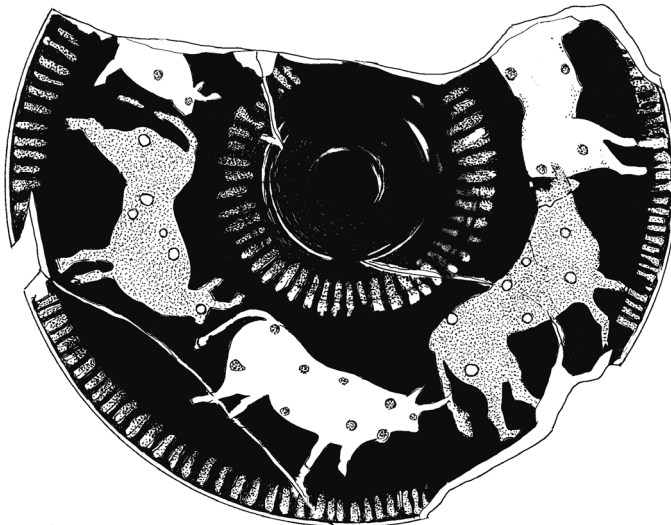
...] oxen, [...] and [Le]pargos.

COMMENT: The Linear B tablets from Knossos and Pylos tell us that cattle were not kept in large numbers in Minoan and Mycenaean Greece, certainly not on the same scale as sheep and goats. But among the tablets from Knossos is a short series of records listing yokes of oxen which have been distributed from the palace on loan to particular herdsman. Remarkably, the oxen appear to have had individual names, some referring to coat colour – Kelainos (Black), Xouthos (Ruddy), Lepargos (Whitecoat) – and some to distinctive markings – Aiolos (Spotted), Podargos (Whitefoot). Other names are more difficult to interpret, but Kajava (2011, 2012) suggests that we should understand Enops (Golden) and Aischros (Ugly). Considerable debate has been raised as to whether these should be thought of as actual names, or simply as functional descriptions designed to prevent the substitution of oxen when the yoke was returned (Killen 1995), but such a distinction does not seem particularly meaningful: as Calder (2011: 39) points out, an animal driven in a team needs an individual name so that specific commands can be given and names for domestic animals were regularly based on appearance. In the *Iliad* Achilles' horses are called Balios (Piebald) and Xanthos (Bay) (XVI.149), and later evidence shows us horses, goats and dogs similarly named for their colour or physical features (see GOAT no. 17, WORKING ANIMALS no. 5). Names such as Kelainos or Oinops thus need not have been any less individual to the ox than a more abstract name.

Named bulls are also found in the Roman world, but more usually as performers: the Cos arena mosaic depicts a bull named 'Arkodamos', 'Bear-slayer' (Toynbee 2013: 149–50).

11. The sacrificial cow

Attic phiale, Athens P32414, from Athens, attr. to the Nikosthenes Painter, c. 500 BCE (drawing by Tessa Rickards)



COMMENT: The fragmentary vessel illustrated above is a *phiale*, a dish used for ritual libations (drink-offerings), dating from the end of the sixth century BCE; it was found in a well in the Athenian Agora. It originally depicted six cows walking around the bowl, using a rare technique of added colour to show their markings; three are white with red spots, and three red with white spots. The design celebrates the importance of the bull or cow as sacrificial victim: in both Greek and Roman society the cow was the sacrificial animal *par excellence*, an impressive and worthy offering, and large enough to provide a communal feast. Most day-to-day sacrifices were of smaller victims, sheep, goats and pigs; only at major festivals would cattle be offered, and for this reason they are very frequently depicted in art, in procession to the altar or awaiting sacrifice (see van Straten 1995: ch. 5.7). We hear of vast numbers of cows sacrificed at civic festivals, such as the thousand cattle collected by Jason of Pherae for his celebration of the Pythian Games in 357 (Xen. *Hell.* VI.4.29). An elaborate ritual surrounded the sacrifice: the victim was washed and garlanded, its horns were gilded, and grain was poured over its head as it stood at the altar to make it nod in acquiescence to its death. Sacrificial cattle were specially bred, distinct from working oxen, and their colour was important: white animals were sacrificed to the Olympian deities, black to the chthonic gods and sometimes red to gods of fire or rust (*ILS* 4914, Festus 358). The red and white spotted cows here also recall the role of the cow in myth: a spotted cow led Ilos, the founder of Ilium (Troy) to the site of the city, and Cadmos to the site of Thebes (Apoll. *Bib.* III.12.3; Pausan. IX.12.1–2).

12. Cattle and social power in Greece

a) Athenian honorary decree, 330/29 BCE (IG II² 351)

Of Eudemos of Plataia

In the archonship of Aristophon; in the ninth prytany of the tribe Leontis; Antidoros son of Antinos of Paeania was secretary: on the 11th [day] of Thargelion, the 19th of the prytany; Antiphanes son of Euonymos of the *proedroi* put the proposal to the vote. Resolved by the people: Lycurgus son of Lycophron made the proposal:

Since Eudemos formerly offered to the people a gift of 4000 *drachmai* for the war, if it was needed, and now has given 1000 yoke of oxen for the construction of the stadium and the Panathenaic theatre, and has sent all of these before the Panathenaia as he promised, the demos has resolved to commend Eudemos son of Philourgos of Plataia and to crown him with an olive crown in recognition of his goodwill towards the Athenian people. He is to be recognised as a benefactor of the people of Athens, he and his descendants, and he shall be granted the right to own land and a house, and to perform military service, and to pay the *eisphora* with the Athenian citizens.

The secretary to the Boule shall have this decree inscribed and set up on the Acropolis, and the treasurer of the demos shall give him [X] *drachmai* to pay for the inscription from the public fund for the inscription of decrees.

b) Decree of Kopai, Boiotia, second century BCE (SEG 22.432)

God. Good fortune.

In the archonship of Archiclidias, when Charinus son of Mnasixenos, Empedon son of Sosikles and Eucheiridas son of Nikon were polemarchs, and Charmon son of Timogeitos was secretary. Resolved by the people. The proposal was put to the vote by Charinos; Eucheiridas son of Nikon made the proposal, according to the motion of the Boule put before the people.

Since by agreement Kleuedra and Olioumpichas have made a loan to the city in time past, and now they have absolved the city of the money which the polemarchs contributed when in charge and in exchange they were granted by the city in the [...] grazing rights for 200 of their own animals each; since the money has been handed over and it is good for the city to demonstrate that it honours its agreement and acts generously towards its benefactors, it has been decided that. . . .

COMMENT: These two inscriptions demonstrate the social capital involved in the raising of cattle in classical and Hellenistic Greece. As Howe (2008) describes, the terrain of Greece was not well suited to the raising of large animals such as cattle and horses, and in general husbandry relied on sheep and goats. The ability to raise cattle required the ownership of extensive grazing, and relationships of status were created which flowed in both directions: ownership of cattle allowed one to act as a benefactor, as Eudemos did in supplying the oxen that provided the draft power for Athens' building project – Rhodes and Osborne (2003: 477) note that it could require 20 or 40 oxen to move the individual stones for building, and Attica was particularly poor in grazing land. Similarly, benefactions could bring reciprocation from grateful *poleis* in the form of grazing rights on public land (*epinomia*): the second decree, from the Hellenistic period, records a grant of *epinomia* by the city of Kopai to two wealthy female benefactors. Chandezon (2003: no. 9) suggests that the animals referred to in the decree are small stock (sheep and goats), but the small numbers permitted, 200 for each woman, compare with the similar grant to one Euboulos by the city of Orchomenos (Chandezon 2003: no. 7) which stipulates either 220 large animals or 1,000 small.

It is no coincidence that both Eudemos and the sisters Kleuedra and Olioumpichas were citizens of Boiotia, the very name of which (meaning 'land of cows') indicated its potential for cattle-raising: Kopai, which made the grant of *epinomia* to Kleuedra and Olioumpichas, is on the northern shore of Lake Copais, one of the few lowland grazing regions of southern Greece. Pride in the ability to raise cattle can likewise be seen in the name of the island of Euboia (good for cattle), the coinage of which regularly depicted cows and calves.

13. Speaking oxen at Rome

a) *Livy III.10.5–7*

In that year (461 BCE) fire was seen in the sky, and the earth was shaken by a great tremor. A cow spoke, something which had happened the previous year and had not been believed, but at this time it was.

b) *Livy XXXV.21.2–5*

(192 BCE) Before the consul and praetors could set out for their provinces, a supplication was held because of prodigies which had occurred. It was reported that in Picenum a goat had borne six kids at one time, and at Arretum a boy had been born with only one hand; at Amiternum there had been a rain of earth; at Formiae the gate and city wall had been struck by lightning; and, most terrifying of all, an ox belonging to the consul Gn. Domitius had spoken, saying, 'Rome, take care!' The supplication was held to expiate the other prodigies and the *haruspices* ordered that the ox should be carefully looked after and fed.

c) Livy XVIII.13.3–8

Two prodigies were reported in this year (169 BCE) from Anagnina: a fiery torch was seen in the sky, and a cow spoke: the cow was taken into the care of the state.

d) Obsequens 53

(92 BCE) An owl was caught by an equestrian in the Temple of Fortuna, but died in his hands; at Faesulae a groaning was heard from the earth. A boy was born to a serving-maid without an opening in his genitals, and a hermaphrodite woman was discovered. A burning brand was seen in the sky; an ox spoke; a swarm of bees nested on the roof of a private house. At Volaterra the river ran with blood, and at Rome it rained milk. Two hermaphrodites were discovered at Arretium. A cock was born with four feet; there were many lightning strikes. A supplication was held, the people brought sacrifices to Ceres and Proserpina, and twenty-seven virgins performed a purification of the city, singing hymns.

COMMENT: Speaking oxen or cows are found frequently among the omens presented in Livy's *History*, from the earliest times down to the first century BCE, and Pliny (*NH* VIII.183) indicates that the phenomenon was common enough for there to be a prescribed response from the Senate: 'if it was reported that an ox had spoken, the Senate meeting would take place in the open air'. The first extract shows that responses to the report of a speaking cow could vary, and Varro (in a rather corrupt passage) seems to mock the idea, saying that an ox pronounced on the rival politicians of his day (*De re rust.* II.5.5), but there is no indication that such reports met with general incredulity. That an animal should speak was obviously felt to be unusual and threatening, but not impossible: the omens also refer to a speaking dog at Ariminum (Obs. 43), while prophetic animals were part of the literary tradition, such as Achilles' horse Xanthos which speaks at the end of the *Iliad* (XIX.404–17). Oxen are most often named as speaking animals for practical reasons – they were common domestic animals and are large enough to make recognisable noises; modern interpretations reach for realist explanations such as gurgling intestines understood as speech (Rasmussen 2003: 40), but this is to misunderstand ancient ideas about communication between gods and humans. The response to a speaking ox or cow was invariably to take it into the ownership of the state to be grazed on public land and carefully tended, partly because the animal had been shown to be an instrument of the gods, and partly in case it had more to say.

14. The care and training of calves

Virgil Georgics III.138–165

Then in turn care for the sires gives way to cares for the dams. When their pregnancy is ending and they wander heavy with young, they should not be brought to the yoke of the heavy cart, nor be allowed to cross the path by jumping, or race around the meadow or swim in the swift-flowing stream; they are pastured in the wide glades and beside the swelling river, on the bank where mosses and the greenest grass grow, where caves provide shelter and overhanging cliffs cast their shade.

[. . .]

Once they are born, all care transfers to the calves; without delay they are branded with their owner's mark and lineage, separating out those to keep for breeding, to

keep sacred for the altar, and to set to break the earth and turn the field furrowed with broken clods. The rest of the herd may graze the green pasture; but the calves which you will raise to train for work on the farm you should take in hand while still young, and begin the path of training while their spirits are still youthful and pliable, and their age biddable.

To begin with, hang around their necks loose collars of thin withies; then, when they have become accustomed to bend the neck to servitude, join them in pairs linked by the same collars and train them to walk in step; next they should learn to draw empty carts across the ground, making hoofprints in the dust; then finally let the beechen axle creak and strain under a heavy load, and the bronzed pole draw the coupled wheels. In the meantime, while yet unbroken, the calves should not eat only grass, or leaves of willow and marshy sedge, but corn gathered by hand; nor should the cows fill the white milk-pails in ancient fashion, but give all their nourishment to their beloved calves.

COMMENT: Virgil's account of the training of draft oxen is considerably more lyrical than Columella's (*De re rust.* VI.2), but the process described is identical in both authors, and shows the investment of time and resources needed to produce a working ox. Cattle are slow to reproduce (ancient writers recommend a pregnancy every other year) and training of calves could not take place before three years. The training itself was a gradual process: both Virgil and Columella say that the best method is to pair untrained oxen with the strongest and most docile of the trained. Potential problems included the unwilling ox that lies down on the job and the idle bullock that refuses to pull its weight. Columella comments that some trainers will use 'goads and fire' to cure such behaviour (VI.2.11–12), but he argues that force is counterproductive and that it is better to use persuasion. Varro does not detail training in his *De re rustica*, and refers instead to buying oxen ready-broken (II.5.10–11), suggesting that professional trainers of draft oxen existed in Roman times. That not all farmers could aspire to own a yoke of oxen is shown by a reference in the Institutes of Justinian (III. 24.2) to lending agreements between neighbours who each own one ox, and agree to lend them ten days about for work on the land.

Once trained, draft oxen would have a long working life – according to Hesiod a plough ox was in its prime at the age of nine (*Works and Days* 436–8) – and Calder (2011: 40) suggests that while literature does sometimes depict stubborn and intractable oxen, by and large they were docile and co-operative, allowing a plough and yoke to be controlled by a single individual. Some sources even suggest that a level of affection could develop between plough-ox and owner, as with Adaeus' epigram on the ox that was given a happy retirement in the pasture (*GA* VI.228).

15. Veterinary treatment for oxen

Columella De re rustica VI.14.3–15

If an ox's neck has been bruised while hauling, by far the best treatment is to bleed it from the ear, or if this is not done, to grind up the herb called groundsel with salt and apply it as a poultice. If the neck is twisted to one side, the ox should be bled from the ear on the opposite side. The vein in the ear which seems to be the largest should be beaten with a twig so that it swells, then opened with a small knife; on the following day the ox should be bled from the same place, and rested from work for two days. On the third day it should be yoked for light work, and gradually returned to normal labour. If the neck does not incline to either side, but is swollen in the middle, blood should be let from both ears. If the ox is not bled within three days from when it sustained the

injury, the neck will swell and the sinews tighten, creating a lump which cannot tolerate the yoke. In such a case an effective treatment is made by mixing and cooking equal amounts of liquid pitch, beef marrow, goat's fat and old oil. It is used in the following way: when the ox is unyoked after work, the swelling is wetted and softened with water from the animal's trough, and massaged, then the remedy is applied and rubbed in. If the swelling on its neck leads the ox to reject the yoke altogether, it should be rested from work for a few days, then the neck should be rubbed with cold water and plastered with litharge of silver. Celsus, on the other hand, recommends the use of groundsel, as mentioned above, for swellings of the neck, crushed and used as a poultice. The warts which often appear on oxen's necks are a minor ailment and can easily be cured by dripping on the oil from a burning lamp. But it is better to take care to prevent their forming and to stop the ox's neck becoming bald, which only happens when the neck becomes wet from sweat or rain while the ox is working. If this happens, one should sprinkle the neck with brick dust before the ox is unyoked, and once it is dry, it should be oiled from time to time.

If the heel or hoof have been injured by the ploughshare, the wound should be bound up with hard pitch, axle-grease, sulphur and unwashed wool, and a burn made above the wound with a hot iron. The same remedy works well when a piece of wood has been extracted from the hoof, if the ox has trodden on a branch, or a sharp tile or stone has pierced the hoof; if the wound is a deeper one, a wider incision should be made around it and the wound cauterised as described above; then the hoof should be covered with a shoe of broom and fomented with vinegar for three days. Again, if the ploughshare has injured the ox's leg, it should be poulticed with sea-spurge (which the Greeks call *tithymallus*) mixed with salt. Worn hooves should be washed with warm ox's urine and the ox be made to stand on the warm ashes created when a bundle of sticks is burnt down to embers; the horn of the hooves should then be painted with liquid pitch mixed with oil or axle-grease. But oxen will be less likely to become lame in the first place if as soon as they are unyoked after work their feet are washed with plenty of cold water, and then stale axle-grease is rubbed onto their hocks, the crown of the hooves and the place where the hoof divides.

COMMENT: The ox is the only animal apart from the horse for which a significant number of veterinary treatments are recorded in antiquity: Columella devotes fifteen chapters of his discussion of cattle to remedies for a variety of conditions, drawing on the Punic veterinary tradition, and the fourth-century writer Vegetius reproduced the material in Book III of his *Mulomedicina*. This is clear testimony to the importance of the ox as the motive power of the farm: an ox that cannot plough prevents cultivation. Even before Columella, Cato, writing in the second century BCE, included remedies for oxen in his *De agricultura*, though these reflect a less sophisticated stage of medical knowledge, since most are either general tonics for good health or remedies for unspecified 'illness', with a strong magical element (Mezzabotta 2001). As well as treatments for infectious disease and for injuries caused by haulage, Columella offers remedies for lameness, fever, cough, colic, diseases of the skin and snake bites, all of which combine herbal treatment with forms of physiotherapy. The magical element is not, however, completely absent from Columella either, who claims that indigestion in both oxen and horses can be cured by the sight of swimming birds (VI.7.1).

Perhaps the most striking aspect of Columella's advice is the close attention to oxen from their herdsman which is suggested: drying the neck, washing feet and oiling hooves. As part of the training process Columella recommends that the ox herd should stroke the ox and accustom it

to his touch, supporting the idea of daily grooming and care. Ploughing and hauling in antiquity were extremely demanding work – II.2.27–8 says that oxen should be rested at the end of each ploughed furrow; see also Hom. *Iliad* XVIII.544–6 – and to maintain oxen in good working condition they needed considerable individual attention.

16. The intelligence of cattle

Aelian On the Nature of Animals VI.10 (b)

Animals remember their experiences, and have no need of mnemonic systems such as those of Simonides, Hippias or Theodectes, or any of the philosophers who are famed for such clever inventions. So, for instance, a cow will go to the place where her calf was taken away and mourn for it with piteous lowings; and when oxen are about to be put to the yoke, some show their enthusiasm, while others draw back.

Plutarch On the Intelligence of Animals 974d–e

It is more remarkable when animals demonstrate that they have an understanding of number and the ability to count, as in the case of the cows at Susa. These cows water the royal park by means of buckets raised by a wheel; the number of buckets is fixed, with each cow carrying one hundred buckets each day. The cows cannot be made to carry one bucket more, not even by force; although they often try to make them carry more, the cows refuse to move, once they have fulfilled their daily task. This story, recorded by Ctesias of Cnidos, shows plainly that cows can reckon and remember numbers.

COMMENT: It is unsurprising that oxen and cows should have been credited with intelligence in antiquity: because they were kept in small numbers and tended carefully, their behaviour could be closely observed, and often seemed to mirror human emotions: the cow's distress at the loss of her calf was often noted (most famously in Lucretius' *De rerum natura* II.352–65). Domestic oxen in particular are long-lived, with a working life of up to fifteen years, so owners had ample time to get to know their animals: Theocritus suggests that cattle would become attached to their herders (*Id.* IV.12–14), and discussions of training oxen regularly comment on individual animals' characters (*Col. De re rust.* VI.2.10–14). The intelligence of cattle is little exploited in modern times, but accounts of Roman entertainments show that oxen could be trained for purposes other than draft work: Pliny speaks of bulls trained to give fight shows and even stand in a racing chariot (*NH* VIII.182), while Martial (*Ep.* V.31) describes bulls which performed with a troupe of child acrobats, a form of entertainment possibly stretching all the way back to Minoan bull-leaping (Younger 1995).

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
G.A. Anderson, 'Sacrifice and sacrificial offerings (OT)', in D.N. Freedman (ed.), *The Anchor Bible Dictionary* 5 (New York 1992), 870–86.
O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (Walnut Creek 1998).
D. Brewer, 'Hunting, husbandry and diet in Ancient Egypt', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 427–56.
D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals: The Egyptian Origins* (Warminster 1994).
L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).

- J.M. Camp, 'Excavations of the Athenian Agora: 1994 and 1995', *Hesperia* 65 (1996), 231–61.
- J. Chadwick, J.T. Killen and J.-P. Oliver (eds), *The Knossos Tablets* (ed.⁴, Cambridge 1971).
- C. Chandezon, *L'élevage en Grèce (fin V – fin 1^{er} s. A.C.): l'apport des sources épigraphiques* (Paris 2003).
- D.J.A. Clines, *Job 1–20* (Nashville 1989).
- L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010).
- I. Finkel and J.E. Reade, 'Assyrian hieroglyphs', *Zeitschrift für Assyriologie* 86 (1996), 244–78.
- J.J. Finkelstein, 'The ox that gored', *Transactions of the American Philosophical Society* 71 (1981), 17–20.
- B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 1996).
- P. Ghalioungui, *Magic and Medical Science in Ancient Egypt* (London 1973).
- A.H. Gordon, 'The observation and use of animals in the development of scientific thought in the ancient world with especial reference to Egypt', in L. Kalof (ed.), *A Cultural History of Animals in Antiquity* (London 2007), 127–50.
- A.H. Gordon and C.W. Schwabe, *The Quick And The Dead: Biomedical Theory in Ancient Egypt* (Leiden 2004).
- F.L. Griffith (ed.), *Hieratic Papyri from Kahun and Gurob* (London 1898).
- W.W. Hallo (ed.), *The Context of Scripture* (3 vols) (Leiden and New York 1997).
- P.F. Houlihan, *Wit and Humour in Ancient Egypt* (London 2001).
- T. Howe, *Pastoral Politics: animals, agriculture and society in ancient Greece* (Claremont 2008).
- S. Hurn, *Humans and their Animals. Cross-Cultural Perspectives on Human–Animal Interactions* (London 2012).
- S. Ikram, *Choice Cuts: Meat Production in Ancient Egypt* (Leuven 1995).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- P. Jones, 'Animal husbandry', in A. McFarlane and A.-L. Mourad (eds), *Behind the Scenes. Daily Life in Old Kingdom Egypt* (Oxford 2012), 109–24.
- M. Kajava, 'Jpa-ko-qe (KN Ch 5728): a new ox name from Knossos?', *Arctos* 45 (2011), 59–70.
- M. Kajava, 'wa-no (KN Ch 5724)', *Arctos* 46 (2012), 59–64.
- J.T. Killen, 'The oxen's names on the Knossos Ch tablets', *Minos* 27–8 (1995), 101–7.
- A.C. King, 'Diet in the Roman world: a regional inter-site comparison of the mammal bones', *JRA* 12 (1999), 168–202.
- S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
- J.L. Kugel, *How to Read the Bible. A Guide to Scripture Then and Now* (New York 2007).
- L. Llewellyn-Jones, *King and Court in Ancient Persia 559–331 BCE* (Edinburgh 2013).
- C. Lord, 'How now sick cow?', *Ancient Egypt* 11.1 (2010), 20–4.
- J. MacInerney, *The Cattle of the Sun: cows and culture in the world of the ancient Greeks* (Princeton 2010).
- M. MacKinnon, *Production and Consumption of Animals in Roman Italy: integrating the zooarchaeological and textual evidence* (JRA Suppl. 54) (Portsmouth, RI 2004).
- S. Mastropaolo, *Lexique Animalier Egyptien: Les Caprins, Les Ovins Et Les Bovins* (British Archaeological Reports International Series) (Oxford 2013).
- M.R. Mezzabotta, 'Ethnoveterinary treatments in Roman antiquity: Cato the Elder's veterinary remedies', *Acta Classica* 44 (2001), 132–52.
- J.L. Miller, *Royal Hittite Instructions and Administrative Texts* (Atlanta 2013).
- A. L. Oppenheim and L. F. Hartman, 'The domestic animals of ancient Mesopotamia according to the XIIIth Tablet of the series HAR.ra = ḥubullû', *Journal of Near Eastern Studies* 4.3 (1945), 152–77.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1988).
- S. Parpola, *Assyrian Prophecies* (Helsinki 1997).
- S.W. Rasmussen, *Public Portents in Republican Rome* (Rome 2003).
- P.J. Rhodes and R. Osborne, *Greek Historical Inscriptions 404–323 BC* (Oxford 2003).
- M. Rice, *The Power of the Bull* (London 1998).
- N.J. Ruane, *Gender and Sacrifice in Biblical Law* (Cambridge 2013).
- A. Scurlock, 'Medicine and healing magic', in M.W. Chavalas (ed.), *Women in the Ancient Near East* (London 2013), 101–43.
- D.K. Sharpes, *Sacred Bull, Holy Cow. A Cultural Study of Civilization's Most Important Animal* (New York 2006).
- E. Teeter, 'Animals in Egyptian literature', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 251–70.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- F.T. van Straten, *Hiera Kala: images of animal sacrifice in archaic and classical Greece* (Leiden 1995).
- N. Veldhuis, *A Cow of Sin* (Groningen 1991).
- H. Velten, *Cow* (London 2007).
- C.E. Watanabe, *Animal Symbolism in Mesopotamia. A Contextual Approach* (Vienna 2002).

- D.P.Wright, *Inventing God's Law. How the Covenant Code of the Bible Used and Revised the Laws of Hammurabi* (Oxford 2009).
- J.G.Younger, 'Bronze-age representations of Aegean bull-games', in R. Laffineur and W.-D. Niemeier (eds), *POLITEIA. Society and State in the Aegean Bronze Age* (Liège and Austin, TX 1995), 507–45.
- F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

GOAT

The goat is the quintessential Mediterranean animal, adapted to rocky and rough terrain, feeding on scrub and trees, and needing little fresh water. It is highly likely that the goat was the first ruminant to be domesticated by humans. In fact, its distant ancestor, the bezoar (or Cretan wild goat, *Capra aegagrus*), still survives, although in much reduced numbers, and roams widely from Crete (where it can be seen in the mountains) to India. It has a shaggy fleece which changes according to the season (red-brown in the summer, grey-brown in winter). Other breeds of wild goat from further east are known and these may have contributed to the ancient domestic breeding stock too, although it is difficult to be specific about their identities (Zeuner 1963). Part of the problem lies in the fact that all goats, wild and domesticated, look remarkably alike and their habits of browsing and grazing are shared. Moreover, in the archaeological record it is notoriously difficult to distinguish between the bones of sheep and goats, let alone between wild and domesticated goat species.

As with the donkey, Iran provides the earliest known evidence for goat-domestication and it was from the Zagros area that knowledge of goat-herding was disseminated across the Near East. Evidence for early goat domestication in the Levant comes from Jericho's Neolithic period (c. 7000–6000 BCE) where the remains of horns show evidence of damage which, it has been suggested, is indicative of confinement in pens. Throughout the Near East two types of goat were originally reared: a corkscrew-horned type and a scimitar-horned sort. Over the centuries variations in size, weight, colour and fleece were looked for through breeding techniques (see SHEEP no. 4; Hinson 2014). Egyptian art shows the clearest variety of goats from any Near Eastern or Classical source.

First kept for its milk, the goat turned out to be a useful animal: goat skins were used as water-bottles and containers, and goat-hair was spun and woven into coarse cloth which was particularly practical for use as tenting. Near Eastern sources tend to reflect the usefulness of the goat and its place in human society. But alongside their usefulness, goats were also destructive: they climbed trees and destroyed them by eating leaves, twigs and buds (below no. 4) and as hardy surefooted animals, goats quickly became feral, damaging and destroying any vegetation they found. The goat is very often placed alongside sheep in both the artistic and literary accounts, accenting the inseparability of the two animals in the ancient Near Eastern mind. Like the sheep, goats also performed an important cultic and ritual function – mainly as sacrificial offerings.

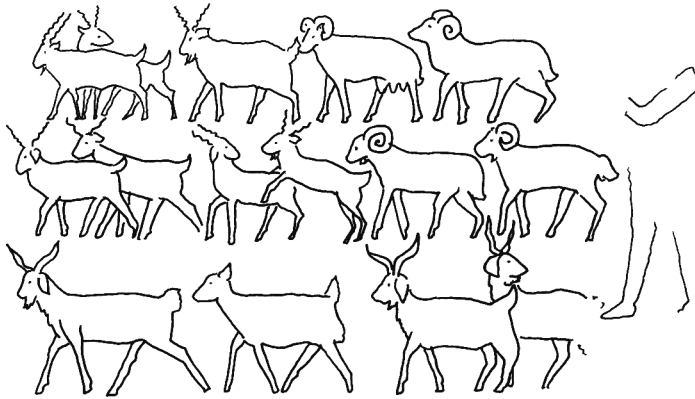
After domestic goats were introduced to Greece from the Near East in the Neolithic period, they allowed farmers to exploit marginal land and offered abundant milk as well as manure for agriculture. It can be difficult to detect goats in the archaeozoological record, because distinguishing between the bones of goats and sheep is very hard, and reports for many sites simply report sheep and goat remains as a single figure, but in general they were strongly regionalised: Greece, especially the islands, offered a habitat very suited to goats, while Italy and the West saw smaller numbers, though they remained a regular part of the pastoral landscape in literature and art (King 2001: 415–16). There is no evidence for distinct 'breeds' of goat in antiquity, although we do see variations in coat and colour: Varro mentions a smooth-coated type, and longhaired angora types

were found in Anatolia (below no. 6). Colours ranged from black though dark brown and tawny to white: Theocritus *Id.* III.5 also refers to a yellow Libyan billy, and a wall-painting from Nero's *Domus Aurea* shows a piebald billy (Toynbee 2013: pl. 82). Native populations of wild goats (ibex) also persisted in some areas (Plin. *NH* VIII.214).

Less docile and more lively than sheep, goats were credited with intelligence as well as wilfulness: they were supposed to be able to self-medicate when ill, treating themselves for ailments of the eye (Ael. *NAV* VII.14; Plin. *NH* VIII.201), eating ivy and sea-crabs to cure sickness (Plin. *NH* VIII.98) and, most famously, the wild goats of Crete eating the herb dittany to remove arrows when hunted (Ar. *HA* 612a 3–4; Thphr. *Plant.* IX.16; Virg. *Aen.* XII.411–15). Pliny also emphasises their intelligence by relating the story of two goats which met on a narrow bridge and found themselves unable to pass: one goat voluntarily lay down to allow the other to pass over (*NH* VIII.201); tellingly, this story was subsequently changed in the medieval fable tradition to become a tale of stubbornness and folly.

1. Captured sheep and goats

***Gypsum wall panel relief from the Central Palace at Nimrud,
Iraq, Neo-Assyrian, reign of Tiglath-Pileser III, c. 732 BCE
(London, British Museum 118881)***



COMMENT: This much worn palace relief shows an unusual scene of three rows of captured sheep and goats. In the upper register three billy-goats with corkscrew horns and wispy 'beards' trot forward; the second in line looks back towards two fat-tailed curved-horned rams which bring up the rear. The middle register includes an interesting little artistic detail drawn from life: a kid-goat jumps up onto the back of another, startled, goat. The bottom register depicts three billy-goats and one fat-tailed ewe. Faintly visible at the right side of the relief is the over-sized image of a man (probably an Assyrian soldier), who is herding the animals and driving them forward. Distinguishing between representations of goats and sheep can be as difficult as determining between them in archaeological remains (Zeuner 1963: 136–40), but in this relief the artist appears to have made a careful study of both species in an attempt to differentiate between them.

Like the sheep, the goat was widespread and valuable in ancient Near Eastern society, and is presumably included under the general terms for flocks (for instance, in the Hebrew bible:

Genesis 4.2, 4, 12.16, 13.5; Exodus 10.9; Psalms 144.13; Job 1.3, 42.12). Imperial tribute was often paid in the form of small cattle, especially goats, and Assyrian rulers proudly enumerate the number of gifts of male and female goats they received. The Hebrew patriarch Jacob is recorded as gifting over 530 animals to his brother Esau, including 200 she-goats and twenty billy-goats (Genesis 32.14). Nabal possessed no fewer than 1,000 goats (1 Samuel 25.2, 3), and Jehoshaphat received the extravagant tribute of 7,700 male goats (2 Chronicles 17.11).

2. Good goat-herding

Hebrew bible, Proverbs 27.23–27

Be sure you know the condition of your flocks,
give careful attention to your herds;
for riches do not endure forever,
and a crown is not secure for all generations.
When the hay is removed and new growth appears
and the grass from the hills is gathered in,
the lambs will provide you with clothing,
and the goats with the price of a field.
You will have plenty of goats' milk to feed your family
and to nourish your female servants.

COMMENT: The importance of goats as domesticated animals to the ancient Israelites is attested by the fact that there are seven ancient Hebrew words for 'goat': the general term for the female animal is *'ez* (plural *'izzim*), while four words are used for he-goats (*sa'ir*, *tayiš*, *'attud* and *sapir*); *gedi* is applied to a young he-goat and *aqo* is used to refer to the wild goat. The passage from Proverbs demonstrates how highly the goat was regarded and how carefully it was reared. The pasturing of goats was carefully overseen because, unlike sheep which linger in one place and eat at their own pace, goats regularly move as they eat. Therefore, when sheep and goats are placed in the same herd, the sheep automatically follow the goats' instinct to roam, thus helping to prevent overgrazing and preserving the health of the pastures. The composer of Proverbs therefore encourages people to find comfort and security in life by being attentive to their goats. In the Hebrew bible the goatherd is not distinguished from the usual term for shepherd since both sheep and goats were normally herded together. In the Song of Songs (1.8), however, the shepherdess is spoken of as one who shepherded her kids.

The metaphor of the goat as a leader is a positive one in the Hebrew bible. The prophet Jeremiah encouraged the Jewish leaders of the Babylonian exile to leave their captivity and, like goats, lead their followers into freedom (Jeremiah 50.8). Likewise, Alexander of Macedon was likened to a goat because of his flair for leadership (Daniel 8.5, 8.21; see below no. 5).

3. A goat lexicon

Old Babylonian period, Sumerian and Akkadian glossary, Tablet XIII of the HAR.ra = ħubullû (after Oppenheim and Hartman 1945)

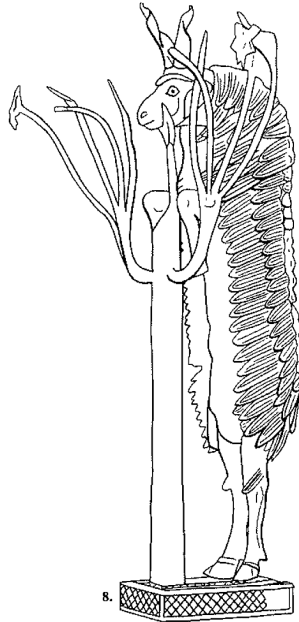
sick [she-goat]
[she-goat] sick of diarrhoea
[she-goat] seized with a constriction

[she-goat] seized with a cutaneous disease
she-goat seized with a lung disease
white she-goat
black she-goat
brown she-goat
dappled she-goat
yellow she-goat
old she-goat
normal she-goat
she-goat giving birth to two lambs of twins
she-goat giving birth to three lambs of triplets
monstrous/ominous she-goat
bought she-goat
she-goat of a (fixed) price
she-goat which has horns
she-goat which has no horns
goat
full grown goat
leading/first goat
gnawing goat
browsing (?) goat
bearded goat
goat capable of begetting
buck
mountain-bred
breast-goat (?)
goat as a gift
goat as a present
marked goat
goat as dowry
[kid]
[fattened kid]
[ki]d which knows the male
[k]id which does not know the male
kid of the fold

COMMENT: Tablets XIII to XV of the *ḪAR .ra* = *ḫubullû* focus on listing domestic animals (see also *DONKEY*, *OX*, *SHEEP*, *COW*, *TAXONOMIES*) according to sex, age, colour, general health, locale and use. The dazzling range of lexical subtleties applied to the goat is symptomatic of how important this animal was to human society. The ordering of the categories of the goat-list roughly follows that created for *SHEEP* (no. 1), although there are some variations.

4. Billy-goat in a thicket

*Early Sumerian statuette, c. 2600 BCE
(London, British Museum 122200)*



COMMENT: This sculpture (with a counterpart in the University of Philadelphia (Arúz 2003: 121)) is one of the most famous objects to come from the royal graves at Ur. Often called ‘The Ram in the Thicket’ (an allusion to a passage in the Hebrew book of Genesis 22.13), the sculpture actually shows the natural pose of a male goat rearing up on its hind legs in order to reach the juicy leaves of a flowering tree, a motif commonly found in Egyptian wall paintings too (Janssen and Janssen 1989: 32, fig. 25). The combination of goat and flowering tree is one of the most important to emerge from third millennium Mesopotamia: the statuette symbolises the centrality of floral and faunal fecundity to the life and prosperity of the city of Ur.

The statuette has a face and legs of gold leaf, with spiral horns, eyes and collar-fleece made from lapis lazuli; the white fleece of its body is crafted from white shell mounted on a wooden core. The image is therefore as costly as it is beautiful. The use of the goat was widespread in the art of Mesopotamia and countless figurines, plaques and seals demonstrate how the animal could be adopted for numerous motifs. Goat and ram horns were also frequent motifs in the art of the Steppes and the goat was a royal symbol in ancient Persia.

5. Fighting ram and goat

Hebrew bible, Daniel 8.1–12

In the third year of King Belshazzar’s reign, I, Daniel, had a vision, after the one that had already appeared to me. In my vision I saw myself in the citadel of Susa in the province of Elam; in the vision I was beside the Ulai Canal. I looked up, and there before me

was a ram with two horns, standing beside the canal, and the horns were long. One of the horns was longer than the other but grew up later. I watched the ram as it charged toward the west and the north and the south. No animal could stand against it, and none could rescue from its power. It did as it pleased and became great.

As I was thinking about this, suddenly a goat with a prominent horn between its eyes came from the west, crossing the whole earth without touching the ground. It came toward the two-horned ram I had seen standing beside the canal and charged at it in great rage. I saw it attack the ram furiously, striking the ram and shattering its two horns. The ram was powerless to stand against it; the goat knocked it to the ground and trampled on it, and none could rescue the ram from its power. The goat became very great, but at the height of its power the large horn was broken off, and in its place four prominent horns grew up toward the four winds of heaven.

Out of one of them came another horn, which started small but grew in power to the south and to the east and toward the Beautiful Land. It grew until it reached the host of the heavens, and it threw some of the starry host down to the earth and trampled on them. It set itself up to be as great as the commander of the army of the Lord; it took away the daily sacrifice from the Lord, and his sanctuary was thrown down. Because of rebellion, the Lord's people and the daily sacrifice were given over to it. It prospered in everything it did, and truth was thrown to the ground.

COMMENT: Daniel's famous vision is, of course, a prophecy: standing in Susa, one of the ceremonial capitals of the Achaemenid Persian empire, Daniel sees a two-horned ram (a symbol of Persia and Media) attacked by a billy-goat bearing one impressive horn (representing Alexander of Macedon). The interpretation of the dream is of little consequence here; what matters is the striking depiction of the dramatic clash between the two powerful male animals fighting for territorial rights. The biblical author gives an accurate depiction of the two animals butting each other in a vicious attack. So strong is the goat that he manages to shatter the ram's horns – a feat not possible in nature, although in fighting, rams and billy-goats aim to inflict injury with their horns and, as in the biblical passage, to throw the opponent off balance. The text captures the powerful charge of the enraged billy-goat.

6. Prohibitions against cooking a kid

Hebrew bible, Exodus 34.26

Do not cook (boil) a young goat in its mother's milk.

Deuteronomy 14.21

Do not eat anything you find already dead. You may give it to the foreigner residing in any of your towns, and they may eat it, or you may sell it to any other foreigner. But you are a people holy to the Lord your God. Do not cook (boil) a young goat in its mother's milk.

COMMENT: Although, for the Jews, goats are listed among the clean animals fit for human consumption (Deuteronomy 14.4), goat meat tended to be eaten less frequently than mutton because of its inferior quality. Moreover, there were specific prohibitions against ingesting particular kinds of goat meat, including the flesh of a young kid cooked in its mother's milk. Why should this be? It is possible that this was a distinctive Canaanite delicacy and that the Deuteronomist places this law into his text to mark out the Yahweh-worshipping Israelites from the Canaanites who

inhabited the same lands. Certainly the use of milk in Canaanite cooking is described in the Middle Egyptian classic, the *Tale of Sinuhe*.

Ruane (2013: 97) suggests that a reason might be found in the figure of the mother goat herself. Although not mentioned explicitly in the text, the prohibition seems to regard her not as a source of meat but as a source of nourishment. If the nanny-goat has milk to feed her offspring, then there is no sense in slaughtering her since her milk is of value to humans too. There is no issue with viewing the kid as food *per se*; the issue is in how it might be cooked.

7. The scapegoat

Hebrew bible, Leviticus 4.22–26; 16.20–22, 26

When a leader sins unintentionally and does what is forbidden in any of the commands of the Lord his God, when he realizes his guilt and the sin he has committed becomes known, he must bring as his offering a male goat without defect. He is to lay his hand on the goat's head and slaughter it at the place where the burnt offering is slaughtered before the Lord. It is a sin offering. Then the priest shall take some of the blood of the sin offering with his finger and put it on the horns of the altar of burnt offering and pour out the rest of the blood at the base of the altar. He shall burn all the fat on the altar as he burned the fat of the fellowship offering. In this way the priest will make atonement for the leader's sin, and he will be forgiven. . .

When Aaron has finished making atonement for the Most Holy Place, the tent of meeting and the altar, he shall bring forward the live goat. He is to lay both hands on the head of the live goat and confess over it all the wickedness and rebellion of the Israelites—all their sins—and put them on the goat's head. He shall send the goat away into the wilderness in the care of someone appointed for the task. The goat will carry on itself all their sins to a remote place; and the man shall release it in the wilderness . . . The man who releases the goat as a scapegoat must wash his clothes and bathe himself with water; afterward he may come into the camp.

COMMENT: Over 70 per cent of references to the goat in the Hebrew bible refer to it as a sacrificial offering; this was its main purpose for the Israelites. But the goat was also the animal central to specific rites of purification centring on the Day of Atonement where the animal was conceived of as a carrier of sins and impurity (Grabbe 1987). On this sacred day, priests and worshippers were cleansed of their sins as the high priest led two goats into the temple, into the presence of Yahweh. Lots were cast and one goat was chosen for immediate sacrifice while the other was selected as the 'scapegoat'. The high priest placed his hands on the head and body of the selected goat and thereby symbolically transferred all of the sins of the congregation into the animal. The goat was then hounded out of the temple, away from human habitation, deep into the wilderness, far beyond Yahweh's chosen people. The image of the goat being driven into the wilderness might lie behind Jesus' use of the goat to signify the end of times (Matthew 25.32–3).

Similar to the Hebrew scapegoat were the Hittite rituals of *Huwarlu* and *Ambazzi* (Wright 1987: 57–60) which also used live animals as bearers of the evil, although substitution is lacking in the biblical scapegoat rite. In the *Huwarlu* ritual, for instance, a dog is waved over the ruler and his palace while an old woman recites an incantation expressing the hope that the dog will carry away evil. The live dog is then let loose. In the *Ambazzi* ritual a mouse is used as the focus of the rite. Interestingly, Mesopotamian literature does not have a clear example of a ritual where a live animal bears evil away from sufferers, but it does have elimination rituals which are

conceptually similar to the biblical scapegoat ritual. The evils which were removed included sorcery, demonic possession and sickness, but not necessarily impurity in the Hebrew priestly sense. In Mesopotamian thought, the goat cast into the wilderness could have functioned merely as a carrier of the evil or, as other Near Eastern rituals show, an offering to a demon which needed appeasement.

8. A really annoying goat

Akkadian poem (Foster 1996: 140)

When Ea [. . .]
and Enlil [. . .]
On account of what pertained to the b[casts].
He caught sight of a goat.
The goat is sick, it cannot [shut (?)] its mouth (!)
The shepherd is disturbed and cannot sleep,
It disturbs his herdsman,
Who must go about, day and night, forever herding.
When Ea saw it,
He called the Wise One, sent him off with weighty charge,
'A goat in pen or fold. . . is disturbing me.
Go, it must not disturb me!
Take its dung,
Stuff it into its left ear,
That goat, instead of falling asleep, let it drop dead!
May Shamkan, lord of the beasts, hold nothing against me,
Nor serve me summons for this case.
Folk and land will sing your praises,
Even the great gods will praise what you can do!

COMMENT: This funny parody is a brilliant study of a man who is driven to murderous rage because he is unable to sleep because of a young goat's ceaseless bleating. It says much about proximity of man and beast within the domestic sphere in antiquity. The poem also plays on the goat's traditional connection to women and the notion that while sheep and men are silent, women and goats are invariably boisterous (Hinson 2014).

The insomniac ascertains that the god of wisdom, Ea, is likewise kept awake by the goat and that the deity commands the god Marduk ('the Wise One') to make the antisocial animal silent. Since the goat has brought so much pain to the ears of the god, Marduk is told to put the goat's own dung into its ears. The poem's sleepless narrator envisages the goat's eventual death with delight, although he hopes that Shamkan, the deity who protects the livestock, will not be angry at him; in fact, so great is his distress at the noisy goat, that he envisages all of mankind praising him because of his actions.

9. *Apkallu* with a young goat

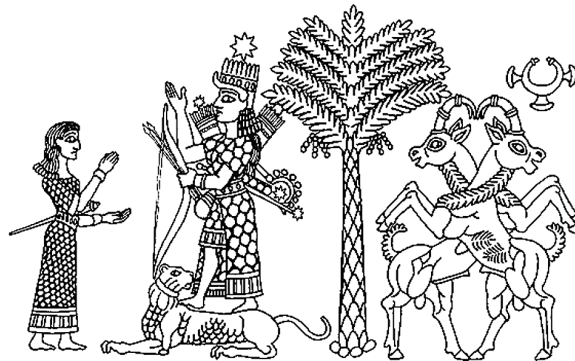
***Gypsum wall panel from the North West Palace at Nimrud,
Iraq, Neo-Assyrian, reign of Ashurnasirpal III, c. 875–60 BCE
(London, British Museum 124561)***



COMMENT: An *apkallu* was a protective spirit. In this image the *apkallu* wears his standard costume of a kilt with long tassels, indicating his semi-divine status, and a fringed robe embroidered with clusters of dates, which is drawn around the body and thrown over his shoulder, leaving the right leg exposed. His body is powerfully muscled and sprouting from his back are an impressive pair of eagle-wings. He carries a young goat and an oversized ear of corn as (probable) symbols of fertility. The animal's body is well observed and elegantly rendered in anatomical detail: the musculature beneath its skin and fur is almost palpable. The visual play-contrast between the bulky strength of the *apkallu* and the delicate frame of the goat is very successful.

10. Battling ibex

***Line drawing of a Neo-Assyrian seal impression,
c. 750–650 BCE (after Leick 1998: plate 38)***



COMMENT: The goddess Ishtar, fully armed, stands on the back of a lion. A worshipper raises his hands in prayer. Behind the goddess is a sacred date palm with two rampant ibexes posed opposite each other, giving a suggestion of a clash or a fight. This is an uncharacteristic motif since, more familiarly, the ibexes are depicted on each side of the tree, trying to reach up for its fruit. However, the seal image is an accurate reflection of the male ibex's aggressive behaviour when in rut – males often clash horns or use them to corral females. The Asiatic subspecies of ibex lives in an area from Afghanistan eastward into Mongolia, while the Nubian variety occupies the arid mountains of the southern Levant, the Arabian peninsula, the eastern Nile valley (Houlihan 1996: 59); it is difficult to know which type of ibex is depicted here.

Other flanking animals – goats, gazelles and stags – are routinely found in date palm scenes on cylinder seals, and each of these animals, including the ibex, are associated with sexual potency and with regeneration (horned animals are specifically linked to Ea, the great life-giving god of wisdom: see GAZELLE no. 4). While very common in Sumerian and early Assyrian seal iconography, rampant ibexes are rare in Neo-Assyrian glyptics, where their place is largely taken by various kinds of protective genies or the king placed in a mirror image on both sides of the sacred tree.

Ibex figure prominently in Achaemenid Persian iconography, although images of the animal are found in prehistoric Iran, suggesting the deep-set importance of the ibex in Iranian culture. Heraldic ibex flanking date palms are also found in images from Susa and the animal appears with some regularity on the wall-reliefs at Persepolis, clearly in ritual contexts. Root (2002: 191) notes that the reliefs demonstrate the continuing importance of the ibex as a symbol in Iran into the period of the Achaemenid kings.

11. Minoan goats

- a) Cylinder seal from Archanes (Ashmolean Museum, Oxford);*
b) Agate prism seal from Midea (Athens National Museum 8754),
1700–1550 BCE (after Bloedow 2003: figs 23 and 62)



COMMENT: These seal-images from Minoan Crete are two of more than 500 depictions of wild goats in the art of the period. In an exhaustive study, Bloedow (2003) has demonstrated that the wild goat (*agrimi*) was central to Minoan culture, second only in importance to the bull. Even though sheep were far more numerous than goats in agriculture (see SHEEP no. 10), the hunting of wild goats was a highly valued activity, and is celebrated along with the goats themselves. Bloedow draws attention to the close observation of goats in the imagery, not only in appearance but also in habits: in the first image the goat perches on a crag above a barking dog, its delicate hooves clearly shown, and in the second two recline at ease.

Wild goats remained abundant on Greek islands after the Dark Ages: Homeric heroes regularly hunt them (*Il.* IV.105–12; *Od.* IX.152–60, XVII.295), and their continuing significance in archaic Greek culture is shown by the evolution of ‘Wild Goat’ style pottery: as the Orientalising style of animal frieze decoration spread from the East in the seventh century, some Ionian states, primarily Miletus and Chios, developed their own style of pottery in which the Eastern-type lions, panthers and sphinxes were replaced by files of recognisable wild goats, deer and geese (Cook and Dupont 1998: ch. 8). The goats are so numerous and distinctive that they gave the style their name.

12. A chorus of goats

Eupolis fr. 13

Goats: We browse on all kinds of trees, fir and prickly-oak and strawberry-tree, nibbling the tender shoots, and the budding flowers too; and on tree-medick, aromatic sage and leafy yew; on wild olive, lentisk, manna-ash, white poplar, holm-oak, downy oak, ivy, heather, willow, thorn-bush, mullein, asphodel, rock-rose, valonia oak, thyme and savory. . .

COMMENT: These lines were sung by a chorus of nanny-goats in Eupolis’ comedy *Goats*, celebrating in a breathless list the huge range of plants on which they feed. Produced in Athens, probably in 424 BCE, *Goats* survives today only in small fragments, so we have little idea of the plot of the play (Storey 2003: 67–74), but a chorus of dancing goats would have offered great scope for entertainment, like Aristophanes’ frogs (see FROG no. 6). These are the only chorus of domestic animals in a comedy of which we know: all others (wasps, frogs, ants, etc.) are wild. According to Rackham (2000) the list of trees and bushes on which the goats claim to feed is not in fact accurate: goats are, for instance, not fond of plants such as sage and rock-rose, and do not eat thyme, mullein or asphodel at all. But comedy is not the place to look for accurate biological information: the chorus here were no doubt joking about their famed omnivorous habits. Goats were certainly popularly believed to be indiscriminate grazers, and there are plenty of alarmist comments in ancient sources claiming that goats will damage croplands if not properly supervised (Plato *Laws* 639a), and that they can kill olive trees with a single bite (Varro *De re rust.* I.2.18–20).

13. A goat for Artemis

Sacred calendars from Attica (extracts)

a) Sacred calendar of Erchia (SEG 21.541)

I 44: Elaphebolion . . . on the sixteenth, to Semele, at the same altar, a goat, to be handed over to the women, the priestess to receive the skin, not to be taken away. 10 dr.

- 52 Thargelion, on the fourth, for Leto, at the Pythion at Erchia, a goat. 10 dr
 II 45: Thargelion, on the fourth, for Apollo Pythios, at Erchia, a goat, to be handed over to the Pythiastai, 12 dr.
 III 21: Gamelion, on the eighth, for Apollo Apotropaïos, at Erchia, a goat, to be handed over to the Pythiastai, 12 dr.
 43: Anthesterion, on the second, to Dionysus, at Erchia, a very young kid. 5 dr.
 IV 1: Hekatombaion On the twenty-first . . . for Artemis on the peak at Erchia, a goat, not to be taken away, the skin to be consecrated. 10 dr.
 33 Elaphebolion, on the sixteenth, to Dionysus, at Erchia, a goat, to be handed over to the women, not to be taken away, the priestess to receive the skin. 12 dr.
 V 31 Gamelion . . . on the eighth, to Apollo Nymphagetes, at Erchia, a goat, 12 dr; for the Nymphs, at the same altar, a goat, 10 dr.

b) Sacred calendar of Thorikos (IG i³ 256 bis)

- 19 [Boedromion] . . . at Sounion, to Poseidon a select lamb; to Apollo, a select young he-goat.
 33 Anthesterion: for Dionysus, on the twelfth, a goat, with its milk teeth, tawny or black.
 40 Mounichion: for Artemis Mounichia, an adult victim; at (the sanctuary) of Pythian Apollo, a triple offering, for Kourotrophos, a piglet; for Leto, a goat; for Artemis, a goat; for Apollo, a goat with its milk teeth; for Demeter, a pregnant sheep, as at the Antheia; for Philonis, a table; for Dionysus, at Mykenon, a he-goat, tawny or black.

c) Sacred calendar of the Marathonian Tetrapolis (IG ii² 1358)

- II.17 Elaphebolion, on the tenth [for Ge at the] oracle, a completely black he-goat, 15 dr.

COMMENT: Inscribed sacred calendars from the fifth and fourth centuries BCE are known from several demes of Attica, listing the regular sacrifices to be made month by month and detailing the deity to receive the sacrifice, the type of victim to be offered and its value. It is clear from these inscriptions that the goat played a distinct role in religion: it was not particularly common as a sacrificial victim, sheep being preferred – according to Van Straten (1995: 171–5) goats account for only 13 per cent of sacrifices in inscriptions, and fewer than 10 per cent in art, whereas sheep make up nearly 60 per cent in inscriptions and about 30 per cent in art. But the goat was sacrificed to some specific deities, as can be seen from the extracts above. In particular it played a significant part in the worship of the ‘Delian Triad’, Apollo, Artemis and Leto: Plutarch (*Thes.* 21) tells us that on Delos, the centre of Apolline worship, there was an ‘Altar of Horns’ made from the left horns of sacrificed goats. A similar horn altar or *keraton* was found at Dreros in Crete dating to the Geometric eighth century BCE, made of stone slabs enclosing a large number of left and right horns from young goats (Marinatos 1936: 241–4). Dark-coloured goats were also appropriate victims for Dionysus and for Ge, the Earth. Artemis, in her aspect as Agrotera (Huntress), was offered goats before battle, both by the Spartans (Xen. *Hell.* IV.2.20) and in the famous vow made by the Athenians before the battle of Marathon (Plut. *Mor.* 862b–c). The pattern is similar in Roman religion: goats are in general rare as victims, but were the appropriate sacrifice at the Lupercalia, to Pan, god of herdsmen and to Bacchus (Ovid *Fasti* I.353–60, II.361, 437–46).

14. The playful goat

Attic chous, New York Metropolitan Museum of Art 21.88.80, c. 400 BCE (Rogers Fund 1921). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: This pot is a *chous*, a miniature jug which was connected with the festival of the Anthesteria at Athens. *Choes* often depict children and their games and pets, and fourteen of them show children playing with goats – frolicking with them, riding them, or as here, in small goat-drawn carts (see Calder 2011: fig. 2; Van Hoorn 1951: figs 181, 297–9, 303–6, 434, 531). There is no reason to believe that the images are unrealistic: other normal pets such as dogs and birds are shown, and given that most families would own at least a few goats it is most likely that with their lively and curious character goats would act as playmates for the children. A well-known epigram by the Hellenistic poet Anyte describes a picture of children with a harnessed goat (GAVI.312), and images of goat-carts for children are found in Rome too: Toynbee illustrates the sarcophagus of a Roman boy, M. Cornelius Statius, which shows the deceased driving a cart drawn by a goat (Louvre Ma 659; Toynbee 2013: pl. 83 and 166 n. 32). *Synorides* (two-wheeled carts) drawn by goats are even mentioned in the great procession of Ptolemy II (Athen. *Deipn.* 200f).

15. Goat islands

Decree of Herakleia (IG XII.7, 509), third century BCE

By Herakles and the other gods of the island, if I keep my oath may I prosper, but if I break it may I suffer the opposite in all affairs. And if any individual uses violence to introduce goats to the island and raise them there, in contravention of the decree and the oath, and kills one of the people trying to prevent him, let the family of the victim and the whole council of the islanders pursue him to bring him to justice. To meet the expenses of the case, let each party contribute their share. The *hieropoios* Epistrophides shall have this decree inscribed on a stone stele and set up in the Metrôon; let the cost of the stele and the inscription be met from the public treasury. Let this be done for the safety and security of the Herakleotai and all the inhabitants of the island.

COMMENT: This inscription, from the small island of Herakleia south of Naxos, is our best evidence for the practice of ‘maritime transhumance’, that is, the use of otherwise unproductive islands for pasturing goats. In the Aegean islands, where good agricultural land was in short supply, it was common to avoid competition for land by sending domestic goats to neighbouring islands for the grazing season (Chandezon 2003: 303–4). The goats could exploit rough pasture and need not even have had a regular water supply, as they can survive by drinking salt water when rain is in short supply (Burke 1990). Several Hellenistic documents seem to refer to the use of islands in this way, such as the arbitration between Kimolos and Melos over possession of the strikingly named Polyaigia (island of many goats) in 336 BCE (*Syll.*³ 621). The decree of Herakleia is an attempt to defend the island against this practice, and the mention of attempts to introduce goats by violent means shows how much pasture was valued. The fears of the inhabitants are easy to understand, both because of the damage that could be done to crops by introducing herds of goats, and particularly in the light of the popular belief that a browsing goat would kill olive trees (Varro *De re rust.* I.2.18–20).

The island of wild goats near the land of the Cyclopes described in the *Odyssey* (IX.116–24) is often cited in this context, but here the nature of the island is different: the goats are wild and are undisturbed by humans, forming part of a tripartite system – islands which are sterile, inhabited only by seals and seabirds, islands inhabited by goats and human-inhabited islands (Trinquier 2009; see SEAL no. 1).

16. Goat husbandry

Varro, De re rustica II.3

Cossinius then said, ‘Since you have bleated on sufficiently, dear Faustulus, let me speak about goats, like Homer’s Melanthius come again, and learn from me how one should keep one’s advice brief and to the point. The farmer who wishes to gather a herd of goats should in choosing them pay most attention to their age, so he buys those which are already old enough to be productive, and which will, furthermore, promise a profit for a long time to come; for young goats are better than old. In appearance they should be large and stocky, with smooth body and a shaggy coat (unless they are smooth-coated, for there are two kinds of goat); they should have two hanging dewlaps under the jaw, which is a sign of fertility, and have large udders so that they give plentiful and rich milk. A billy-goat should have soft hair, preferably white, a short neck and

shoulders, and a long throat. The herd will be better if it made up of goats from a single site rather than gathered from all over. About breeds, I say the same as Atticus did about sheep, except that sheep are quieter, because they are more placid; goats, in contrast, are more lively, and Cato writes of their agility in his *Origines*: “On Mounts Soracte and Fiscellum are found wild goats which can jump more than sixty feet from a crag.” Just as our domestic sheep are descended from wild sheep, so domesticated goats come from wild ones, after which the island of Caprasia off the Italian coast is named. Billy-goats for breeding should be chosen from the best stock, that is, nannies which regularly drop twins; and some owners even go so far as to import nannies from the island of Melia, because they judge that the largest and most impressive kids are found there.

On the purchase of goats my advice differs from the norm, since no one in his right mind can guarantee goats which are healthy, as they are never free of fever. Therefore the bargain is struck with a few stipulations, in the formula preserved by Manilius: “Do you vouch that these goats are in good health today, are able to drink and can legally be sold?” It is also a remarkable characteristic of goats, claimed by attentive goatherds, that they breathe not through their nostrils as other animals do, but through their ears (so says Archelaus).

On the remaining four points, my advice about care is as follows: the herd should be stabled in a spot which faces sunrise in winter, as goats are particularly sensitive to the cold. The byre should have a floor made of stone or tile (as it always should) to prevent the enclosure becoming wet or muddy. When they are penned outdoors, the folds should face in the same direction, and should be floored with twigs so they do not become trampled into mud. The feeding of goats is very similar to that of sheep, but they have some particular requirements, preferring woodland pasture to meadows; for they feed eagerly on wild shrubs and on cultivated land crop the bushes – they take the name ‘*capra*’ from their cropping. For this reason in a contract for the lease of a farm it is usually stipulated that the farmer should not pasture the offspring of goats on the farm, as their grazing is damaging to all forms of cultivation. . . . As to breeding, at the end of autumn the billy-goats are brought from the grazing flock to the goat-enclosure as described for rams. The nanny-goats carry their young for four months and give birth in the spring. The kids are reared until they are three months old, then they are turned out to join the herd. What can I say about goats’ health, when these animals are never healthy? Only one thing: the chief goatherds keep written accounts of the remedies to use for specific diseases and for wounds to the body, which often occur when goats fight one another with their horns or feed in thorny places. Lastly I should advise on numbers, which are usually smaller in herds of goats than in flocks of sheep, because goats are frisky and tend to scatter, whereas sheep flock together in one place. Therefore in the *ager Gallicus* any smaller herds are preferred to fewer larger ones, as in a large herd disease can spread very rapidly and lead to the loss of all. A sufficient size for a herd of goats is around fifty head. Proof for this can be found in the experience of Gaberius, a Roman equestrian, who had an estate of a thousand *iugera* close to Rome; he heard from a goatherd who had brought ten goats to the city that he had earned a denarius a day from each goat and so Gaberius bought a thousand goats, hoping to make a thousand denarii a day in profit. But he was disappointed, as within a short time he lost them all to disease. On the other hand among the Sallentini and in Casinum as many as a hundred goats are herded together. There is the same difference of opinion over the ratio of billy-goats to nannies: some advise one billy to ten nannies, which I agree with; others like Menas advise one to fifteen, and quite a few, like Murrius, one to twenty.

COMMENT: Neither Varro nor Columella (*De re rust.* VII.6–7) offers a very long discussion of goat husbandry, in contrast to their lengthy treatments of sheep, and this reflects the status of the goat in Roman Italy. According to MacKinnon (2004: 121) average ratios of sheep to goats in the zooarchaeological evidence at Italian sites are three or four to one, with sheep being more highly valued both for wool production and for meat; at Pompeii King records as many as eight sheep for each goat (2001: 416). Goats were the animal of the poor – numbers of goats are higher in the rougher pastures of the south – and their meat was considered to be of inferior quality; they were kept primarily for milk and manure. Varro (II.11.11) and Virgil (*Georg.* III.312) note the use of goat hair for making rope and tents; only in Anatolia were long-haired angora goats raised, which produced a finer fabric made into garments called *cilicia* (Varro II.11.12; see Levick 2004: 194–5).

Varro's account is significantly more rambling than his discussions of other animals and includes some odd material including astronomical observations and the claim that goats breathe through their ears (which originated with the fifth-century BCE author Alcmaeon, though Aristotle already rejects the idea (*HA* 492a 14–15)). Varro characterises goats as generally weak and difficult to keep in large numbers, but while the Romans did to some extent take their preference for cattle and pigs with them as their influence spread, goats remained the mainstay of agriculture in Roman Greece, Asia and North Africa (Potter 2014: 13–14).

17. Goatherding

Longus, Daphnis and Chloe IV.4.2–4, 13.5–15.4

Lamon also instructed Daphnis to fatten the goats to the best of his ability, because the master, returning after such a long time away, would certainly wish to see them. And Daphnis was encouraged at the thought of earning praise for his care of the goats (for there were now twice as many as when he took charge of them, and he had not lost one to the wolf, and they were fatter than the sheep); and hoping thereby to make the master more favourable towards his marriage, he set about their care with great assiduity, taking them out to graze at dawn and bringing them back at early evening. He led them to drink twice a day and brought them to the lushest spots for grazing; and he made new basins and milking pails, and larger cheese-baskets. Such was his attention that he even oiled the goats' horns and combed their coats, so that to see them you would have thought that they were Pan's sacred flock.

...

After this [the master] even went to the goat-pasture to inspect the goats and their herdsman. Chloe was shy and ran off into the wood, in fright at such a great crowd of people, but Daphnis stood wearing a shaggy goatskin around his waist and a newly-stitched bag slung across his shoulder, holding in one hand some fresh cheeses and in the other some suckling kids. If Apollo ever worked as a herdsman for Laomedon, he would have looked as Daphnis did then. Daphnis himself said nothing, but blushed and bowed, holding out his gifts, but Lamon said, 'Master, here is your goatherd. You gave me fifty nanny-goats and two billies to graze, and this man has made them a flock of a hundred, and ten billies. Do you see how shiny their coats are, and their horns unscratched? He has also made them musical: they obey his pipes in every instruction.' Kleariste, the master's wife, happened to be present at Lamon's words, and she was seized with the desire to make trial of what she had heard, so she ordered Daphnis to pipe to the goats in his accustomed way; she promised to give him a tunic, cloak and shoes if he did so. Daphnis then sat the onlookers down as though in the theatre, stationed himself

under the oak tree and took his pipes out from his bag. First he blew gently into them, and the goats raised their heads from the grazing and stood still; then he played the tune to make them graze, and the goats put their heads down and returned to eating. Then he sounded a clear, sweet note and the goats all lay down together, then at a shrill melody they all ran off to the wood as though chased by a wolf. After a short time Daphnis played the tune to call them, and the goats emerged from the wood and ran up around his feet. You could not see human servants so eager to obey their master's commands. All the onlookers were impressed, particularly Kleariste, who promised to give him the gifts she had offered since he was not just a fine goatherd, but a musical one.

COMMENT: Longus, writing in the second half of the second century CE, forms part of the tradition of pastoral literature focusing on the life of herdsmen and their relationship with their animals, and depicting rustic simplicity as an attraction for jaded city-dwellers. Nevertheless, depictions in pastoral can illustrate the reality of animal-herding: in these extracts emphasis is placed on Daphnis' attention to and closeness with his goats. Aristotle notes that goats are more companionable towards humans than sheep (*HA* 611b 31–3), and they seem to have been more individuated than sheep, because they are by nature more self-willed and more characterful. Longus tells us twice (IV. 26, 38) that Daphnis knows his goats by name, though no examples are given; Theocritus, however, in his *Idylls*, does include some names for goats: Konaros (Pinecone), Kissaita/Kinaitha (Ivy) and Phalaros (Piebald), as does Alkiphron (Chione, Snow-white) (*Idylls* I.151, V.100–3; *Letters* 2.18). Alkiphron, who was Longus' contemporary, also mentions goats' responsiveness to music (*Letters* II.9), but this is not borne out by any practical advice from antiquity and probably derives from the tradition of herdsmen singing and piping in pastoral poetry.

In *Daphnis and Chloe* Daphnis is presented as handsome and desirable, but goatherds were usually considered to be at the bottom of the rustic hierarchy, because goats are smellier than sheep and less impressive than cows (Berman 2005). Goats were also seen as the most sexualised of domestic animals, and thus goatherds were regular targets of accusations of bestiality (Ael. NA VI.42; GA XII.41; see Calder 2011: 29).

Bibliography

- J. Aruz, *Art of the First Cities. The Third Millennium BC from the Mediterranean to the Indus* (New York 2003).
 D.W. Berman, 'The hierarchy of herdsmen: goatherding and genre in Theocritean bucolic', *Phoenix* 59 (2005), 228–45.
 E. Bloedow, 'The significance of the goat in Minoan culture', *Præhistorische Zeitschrift* 78 (2003), 1–59.
 O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (Walnut Creek 1998).
 D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals: The Egyptian Origins* (Warminster 1994).
 M.G. Burke, 'Seawater consumption and water economy of tropical feral goats', *Biotropica* 22 (1990), 416–19.
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 W.J. Carby, P. Ghalioungui and L. Grivetti, *Food: the Gift of Osiris* (2 vols) (London, New York and San Francisco 1977).
 C. Chandezon, *L'élevage en Grèce (fin V^e – fin 1^{er} s. A.C.): l'apport des sources épigraphiques* (Paris 2003).
 M.E. Cohen, *An English to Akkadian Companion to the Assyrian Dictionaries* (Cornell 2011).
 C. Constantakopoulou, *The Dance of the Islands: insularity, networks, the Athenian Empire and the Aegean world* (Oxford 2007).
 R.M. Cook and P. Dupont, *East Greek Pottery* (London and New York 1998).
 B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 1996).
 L.L. Grabbe, 'The scapegoat: a study in early Jewish interpretation', *Journal for the Study of Judaism* 18 (1987), 152–67.
 J. Hinson, *Goat* (London 2014).

- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- B.K. Ismail and J.N. Postgate, 'A Middle Assyrian flock-master's archive from Tell Ali', *Iraq* 70 (2008), 147–78.
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Warminster 1989).
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001) 401–50.
- G. Leick, *A Dictionary of Ancient Near Eastern Mythology* (London 1998).
- B. Levick, 'The Roman economy: trade in Asia Minor and the niche market', *Greece and Rome* 51 (2004), 180–98.
- E. Lytle, 'The strange love of the fish and the goat: regional contexts and Rough Cilician religion in Oppian's *Halieutica* 4.308–73', *TAPA* 141 (2011), 333–86.
- M. MacKinnon, *Production and Consumption of Animals in Roman Italy: integrating the zooarchaeological and textual evidence* (JRA Suppl. 54) (Portsmouth, RI 2004).
- S. Marinatos, 'Le temple géométrique de Dréros', *BCH* 60 (1936), 214–85.
- A.L. Oppenheim and L.F. Hartman, 'The domestic animals of Ancient Mesopotamia according to the XIIIth Tablet of the series HAR.ra = ḥubullû', *Journal of Near Eastern Studies* 4.3 (1945), 152–77.
- D.S. Potter, *The Roman Empire at Bay, AD 180–385* (ed.², London 2014).
- O. Rackham, 'Aegological note on Eupolis Fr. 13', in D. Harvey and J. Wilkins (eds), *The Rivals of Aristophanes: studies in Old Comedy* (London and Swansea 2000), 349–50.
- M.C. Root, 'Animals in the art of ancient Iran', in B.-J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 169–210.
- N.J. Ruane, *Sacrifice and Gender in Biblical Law* (Cambridge 2013).
- I.C. Storey, *Eupolis, Poet of Old Comedy* (Oxford 2003).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- J. Trinquier, 'Protée en sa grotte ou le parti pris du phoque' in A. Rolet (ed.), *Protée en trompe-l'oeil: genèse et survivances d'un mythe, d'Homère à Bouchardon* (Rennes 2009), 63–103.
- G. Van Hoorn, *Choës and Anthesteria* (Leiden 1951).
- F.T. van Straten, *Hiera Kala: images of animal sacrifice in archaic and classical Greece* (Leiden 1995).
- D.P. Wright, *The Disposal of Impurity: elimination rites in the Bible and in Hittite and Mesopotamian literature* (Atlanta 1987).
- F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

SHEEP

In the Near East sheep were first domesticated c. 7000–6000 BCE in the Zagros Mountains and in the lowlands of Mesopotamia. Human control over their breeding and food supply resulted in the elimination of the aggressive large-horned males which were commonly found in the wild, and a change in the body-shape, size, horn-growth and behaviour of all domesticated breeds (*Ovis aries*). As a result, the domesticated sheep species expanded in number beyond anything possible in the wild, and at the same time their ancestors were pushed into increasingly marginalised areas of the countryside (Zeuner 1963: 153–98). The cultivation of cereal grasses (first in the Levant) and the herding of sheep (and goats) gave rise to new food-producing economies and evidence from Mesopotamia c. 5500 BCE suggests that developments in economic and social structures arose as a result of sheep-herding mentalities.

Sheep continued to play a fundamentally important role in the development of urban communities from the fourth millennium BCE. Textile production in particular was a pillar of Mesopotamian society, while specialist pastoralists emerged to supply communities with meat and dairy products in exchange for crafted goods and agricultural produce. Across the whole of the Near East nomadic or semi-sedentary pastoralists operated outside the limits of urban control and the Mari archives of the mid-second millennium BCE reveal that pastoral nomads had become an influential and often disruptive force throughout the area (Porter 2012).

The history of domestic sheep (Egyptian *b3*, *w3p.t*, *sr* and *hdt*) in Egypt is difficult to trace. Certainly sheep were not native to the Nile Valley and they were probably gradually herded, even over many centuries, from Mesopotamia and the Levant across Sinai and the north coast of Egypt and into the Fayum where the earliest evidence for sheep has been dated to c. 5000 BCE (Reed 1959). The benefits of sheep as providers of wool, milk and meat were plain to the Egyptians, and by the New Kingdom vast herds were being owned by the state. Two breeds of Egyptian sheep were reared: the original stock was a fleecelless type with corkscrew horns, but in the Middle Kingdom Asiatics introduced a wool-producing sheep with curved horns and a fat tail; the tomb of Khnumhotep III at Beni Hasan shows both types of sheep together (Carby et al. 1977: i. 212–21, Janssen and Janssen 1989: 32, fig. 26). By the New Kingdom the fleecy sheep had come to predominate (Houlihan 1996: 22).

Varro's claim (below no. 15) that the sheep was the first animal to be domesticated among the Greeks and Romans is essentially correct: it was the first of farm animals, and second only to the dog (Ryder 1983: 22). Sheep were suited to a wide range of environments and could be kept on mountain pastures over the summer, making them more useful than cows; they were kept extensively for wool and also for milk and cheese, in flocks which ranged in size from one or two animals on a family farm (*GA* IX.149–50) to flocks of a thousand or more in large-scale ranching systems. A great deal of information about sheep husbandry and products survives from Greece and Italy, though archaeological evidence for ancient sheep is difficult to find, since distinguishing between sheep and goat remains is extremely difficult. One piece of direct evidence has survived, however, in the form of sheep hoofprints on Roman tiles left out to dry in the open air (Ryder 1983: 176–7 and fig. 3; Cram and Fulford 1979). Ryder suggests that hoofprints are common not because sheep were free to wander in ancient towns, but because they could be used for trampling and compacting the clay in the tilemaker's preparation process.

Although the sheep was of great significance in Mediterranean agriculture, it was not held in high regard in Greece or Rome. Not noble, cunning or brave, the qualities which made the sheep valuable, its docility and gregariousness, were little admired. Aristotle declares that they are the least intelligent of animals, requiring human protection in order to survive (*HA* 610b 22–8), and while he tells us that in Greece each flock had a named bell-wether as leader (573b 24–7), no individual name of sheep has survived from antiquity (in contrast to the goat).

1. Types of sheep

Old Babylonian period, Sumerian and Akkadian glossary, Tablet XIII of the HAR.ra = ħubullû (after Oppenheim and Hartman 1945)

Male sheep
(male) sheep barley-(fed)
fine sheep marked (?) with the dagger brand
sheep shorn with the . . .
shorn sheep treated with . . . whose heart(?) is . . .
male sheep
ram sheep with (intact) sexual organ
sheep which is fit for breeding
breeding sheep
sheep grass-(fed)
sheep fat

fat sheep barley-(fed)
sheep with *gukallu*-design
sheep (bred in) Maratu-country
Amurrian sheep
Ur sheep
sheep of the fold
ram sheep of the fold. . .
[. . .] lame [castra]ted (?) sheep
[sheep] of the mountain
mountain-(grown) sheep
sheep of/for the gods
sheep to be eaten at the festival of the gods
sheep to be eaten by the lion
sheep to be eaten by the wolf
lamb for the lion
lamb for the [. . .]
sick sheep whose interior is upset
sheep with diarrhoea
sheep seized with a constriction
sheep which is scabby
sheep seized with a disease of the lungs
cleaned(?) sheep
[weak sheep]
weak [] weak []
sheep whose mouth was washed
sheep of the stable
sheep of the second story of the roof. . .
sheep for the. . .
plucked sheep
plucked mountain-(bred) sheep
plucked *martu* sheep
sheep for the oracle-priest
sheep as an offering
sheep as incoming tax
fattened sheep stout
sheep for the oath-(ceremony)
sheep from the booty
sheep from the booty, male
breast-sheep
sheep as a gift
stolen sheep
sheep of the butcher carcass
mutton (hung in the) shade
cooked mutton
dried mutton
pickled (?) mutton
roasted mutton
white sheep

white black sheep
black sheep
brown sheep
dappled sheep
yellow sheep
old sheep old
normal sheep
full grown sheep
monstrous/ominous sheep
sheep of/for a sale/purchase
sheep of a (fixed) price
sheep for board/allowance
sheep for the *ninni*-offering
sheep for the *taklimu*-offering
sheep for the new/full moon ceremony
sheep for the oath-ceremony
sheep for the purification (?)
sheep for an offering
sheep as dowry
sheep as gift
sheep as a spontaneous offering
sheep (to be offered) at the grave
sheep of/for the hand
sheep of/for the barber
sheep for the laying-on of hands
sheep given as a gift, sheep as a gift
sheep given as the dowry
sheep for the Aaipu-priest
sheep for the cleaning-ceremony
sheep for the altar of the heaven
sheep for the altar of Utu
sheep for the altar of Sin
sheep as an incoming delivery
sheep as an expenditure
sheep which goes first
sheep of a (fixed) price.
sheep with horns
sheep without horns
ewe
fine (well fed) ewe
ewe which is not fine (well fed)
ewe which has (already) lambed
ewe which has not (yet) lambed
ewe big with lamb which [. . .]
ewe which has miscarried
lamb
suckling lamb
milk-fed lamb

male lamb
summer lamb
winter lamb
early/spring lamb, male
early/spring lamb, female
mature male lamb able to breed
mature female lamb

COMMENT: The tablets of the *ḪAR-ra*=*ḫubullû* listing animal types are discussed above in TAXONOMIES no. 1. Tablets XIII to XV of the *ḪAR .ra* = *ḫubullû* categorise domestic animals (see also DONKEY, OX, GOAT), and sheep occupy by far the most space in the tablets. The sheer, somewhat overwhelming, range of lexical terms coined for this animal reveals how closely humans and sheep shared their lives (see further Cohen 2011: sv sheep). The tablets record the vocabulary of a highly developed sheep-economy and the nuances of terminology used to refer to sheep distinguishes them in several ways: by sex, by age and by season, by colour and appearance, by health, by location (of birth, breeding or placement) and by intention (i.e., a statement of the sheep's fate – for the offering table, the festival, the dowry list, and so forth). The ordering of the sheep list falls roughly into categories, although some (appearance and intention) come up more than once, and others are hard to explain: why a sheep should be listed as 'to be eaten by the lion' or 'by the wolf' is difficult to comprehend.

2. Counting sheep: a flock-master's archive

Middle Assyrian Akkadian cuneiform tablets from Tell Ali, Iraq (after Ismail and Postgate 2008)

248 ewes, 45 fem[ale lambs], 182 wethers, 50 male lambs, 4 male goats. Total: 529 flocks belonging to the palace in the charge of Ekuza, the flock-master of [At]mannu. [. . .] of the eponymate of Ber-šumu-lesir, which Iddin-Aššur the governor reviewed. 14 Month of Šasarrate (VIII), 12th day. Eponym: Ber-šumu-lesir.

322 ewes, 90 female lambs, 167 wethers, 70 male lambs, 23 adult female goats, 8 female kids, 17 male goats, 8 male kids. 9 Total: 705 mixed flocks under the control of Ekuza, the flock-master. Month of Ša-kenate (IX), 15th day. Eponym: Libur-zanin-Aššur.

206 ewes, 33 female lambs, 115 wethers, 18 male lambs, 4 male goats. 9 Total: 376 flocks in the charge of Ekuza, the flock-master [of] Atmani, of the eponymate of Aššur-nadin-sume, son of Assur-le'e. Month of Belat-Ekalli (VII), 25th day. Eponym: Aššur-nadin-sume.

4 wethers, when the king held the . . . , one house sacrificed for . . . 4 wethers, when the king returned from Sugi to Šuhisaḫ, Ebenusi sacrificed, also for . . . 7 wethers on the 20th day for the libations were sacrificed in Šuhisaḫ. 2 lambs for . . . , 1 live lamb to the cooks' house they took. 1 wether Iddin-Aššur gave to Šamaš-ella. 1 lamb Uthušenni the barber took in Turšan. These are the sheep which were sacrificed in Šuhisaḫ at the royal progress.

A tablet for 5 talents 24 minas wool, in the charge of Takbaru, son of Aišehra, the flock master, Iddin-Marduk, son of Uballissu-Marduk, has received. Issued for the work-materials of the slave-women of the palace.

COMMENT: These texts, representative of a much wider genre, are part of a small archive of about twenty-five cuneiform tablets discovered at Tell Ali, Iraq. The texts convey a clear image

of the Assyrian interest in the husbandry of sheep as a source of meat for special occasions and of wool for everyday textile production (Breniquet 2014). They also show that individual flock-masters were put in charge of overseeing the animals and animal products as part of a government stock-breeding initiative controlled from the small local centre of Atmannu, and described in the texts as ‘belonging to the palace’. The documents are concerned with the animals themselves and with their products. The flock master (Akkadian *naqidu*) was not a shepherd who pastured the sheep day-in, day-out, but an official who managed the palace’s stock-breeding enterprise, in particular the manufacture and distribution of wool. The sheep are said to be in the charge of (literally ‘of the hand of’ – *ša qāt*) the flock-master, a standard Middle Assyrian phrase implying organisational duty (Ismail and Postgate 2008: 153).

As with the *ḪAR.ra* = *hubullu* tablets, the Tell Ali archive gives a variety of names for sheep, including young male sheep, adult female sheep, fat-tailed sheep, and lambs. Ismail and Postgate (2008: 152) suggest that a coherent picture of flock-composition emerges from the archive:

As is to be expected, the adult females always constitute the highest number, followed by the adult males . . . [A]nimals for consumption are mostly drawn from the adult males, but . . . male lambs are also taken from the flocks for various purposes. It is noticeable that in at least three cases a flock predominantly of sheep has just a few goats.

This is consistent with the over-all impression of flock-management across Mesopotamia.

Recent investigation by Kozuh (2014) has done much to improve our understanding of the role of sheep in Near Eastern temple economies. In the mid-first millennium BCE, the Eanna temple at Uruk, for instance, sacrificed at least nine lambs per day in its basic routine offerings to its deities, but special holidays and festivals could see the number of sacrificial lambs rise to as many as 90 each day. The final tally shows that the Eanna temple sacrificed around 4,300 lambs every year. Unsurprisingly, the temple charged more than 120 herdsmen with the care of hundreds of thousands of sheep and goats and the herdsmen were expected to deliver male lambs to the temple for sacrifice; they also delivered wool, which the temple sold off in bulk.

3. Flock genetics

Hebrew bible, Genesis 30.27–43

Laban said to (Jacob), ‘If I have found favour in your eyes, please stay. I have learned by divination that the Lord has blessed me because of you.’ He added, ‘Name your wages, and I will pay them.’

Jacob said to him, ‘You know how I have worked for you and how your livestock has fared under my care. The little you had before I came has increased greatly, and the Lord has blessed you wherever I have been. But now, when may I do something for my own household?’

‘What shall I give you?’ he asked.

‘Don’t give me anything,’ Jacob replied. ‘But if you will do this one thing for me, I will go on tending your flocks and watching over them: Let me go through all your flocks today and remove from them every speckled or spotted sheep, every dark-coloured lamb and every spotted or speckled goat. They will be my wages. And my honesty will testify for me in the future, whenever you check on the wages you have paid me. Any goat in my possession that is not speckled or spotted, or any lamb that is not dark-coloured, will be considered stolen.’

‘Agreed,’ said Laban. ‘Let it be as you have said.’ That same day he removed all the male goats that were streaked or spotted, and all the speckled or spotted female goats (all that had white on them) and all the dark-coloured lambs, and he placed them in the care of his sons. Then he put a three-day journey between himself and Jacob, while Jacob continued to tend the rest of Laban’s flocks.

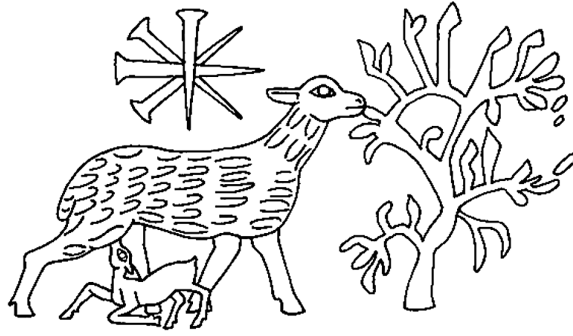
Jacob, however, took fresh-cut branches from poplar, almond and plane trees and made white stripes on them by peeling the bark and exposing the white inner wood of the branches. Then he placed the peeled branches in all the watering troughs, so that they would be directly in front of the flocks when they came to drink. When the flocks were in heat and came to drink, they mated in front of the branches. And they bore young that were streaked or speckled or spotted. Jacob set apart the young of the flock by themselves, but made the rest face the streaked and dark-coloured animals that belonged to Laban. Thus he made separate flocks for himself and did not put them with Laban’s animals. Whenever the stronger females were in heat, Jacob would place the branches in the troughs in front of the animals so they would mate near the branches, but if the animals were weak, he would not place them there. So the weak animals went to Laban and the strong ones to Jacob. In this way the man grew exceedingly prosperous and came to own large flocks, and female and male servants, and camels and donkeys.

COMMENT: This passage in the Hebrew bible provides early evidence for a fallacy – still followed by pastoralists in parts of the world today – that things seen or ingested by expectant ewes, in the months immediately preceding birth, can affect the appearance of the new-born lambs. The young Hebrew patriarch Jacob selects ewes and rams he considers to be the strongest, and then he creates a striped white pattern out of bark and places this inside the watering troughs of the ewes in heat so that they would give birth to marked lambs. Given that most sheep were white (fewer were typically black), deviations from the norm were relatively scarce and would have possibly commanded a higher price. The inference in the text is that by selecting the healthiest animals for his flock, Jacob unconsciously understood flock genetics, although he attributed his success to his folk-knowledge of the striped branches and was therefore clearly bound by the superstitions of his time. By this means Jacob got for himself a healthy flock of parti-coloured sheep while his father-in-law, Laban, had to be content with weaker sheep which were either white or black (Wenham 1994: 254–60).

Similar concepts are found in classical scientific and agricultural writers: Aristotle said that the colour of a ram’s offspring was determined by the colour of the veins beneath its tongue (*HA* 574a 5–8), and subsequent writers reproduced this, adding that the colour of a lamb could also be affected by the kind of water which the ewe drank (Pliny *NHVIII*.189; Varro *De re rust.* II.2.14). In this case, however, sheep breeders were concerned to preserve the white fleece of their flocks, which commanded the highest value (see further below no. 14).

4. Ishtar in the guise of a nursing-ewe

Impression of a cylinder seal from Ashur, Middle Assyrian period, c. 1500–1000 BCE (after Harper et al. 1995: 91 and Parpola 1997: XXXVIII, fig. 17)



COMMENT: A shaggy-fleeced ewe, striding forward, thrusts her head into a gorse bush to eat; as she does so, her lamb suckles beneath her. The nursing motif, popular in Near Eastern art (see HORSE, COW), stresses the close bond between mother and infant. But the image is more than just a naturalistic scene: the star above the ewe's back is actually the cuneiform sign DINGER, 'god', and the ewe suckling her lamb is a goddess. She represents Ishtar as a nursing mother, a role frequently played by this most martial of goddesses, as described in the Assyrian royal oracular texts: 'You whose mother is [Ishtar], have no fear! You whose nurse is [Ishtar] the Lady of Arbela, have no fear!' (Parpola 1997: 39).

The choice of depicting Ishtar as an ewe is no accident. Females of any domestic flock were of more importance than the males (Ruane 2013). The herds belonging to temple and palace complexes were predominantly made up of young males which had no intrinsic value beyond mating, so they were the most regular victims of sacrifice. Beyond the temple and palace walls, however, flocks were kept to provide milk, meat and wool. Depending on the needs of a community, the gender and age ratios of any flock could vary: in a wool-producing community, females were allowed to breed less frequently and males were allowed to grow to adulthood (although a percentage of males were always castrated), whereas subsistence farming tended to privilege milk production. In a milk-producing community, young males were culled at the expense of females which were bred regularly so as to produce milk continually.

Ewes were symbols of fecundity and the Sumerians used a stock phrase – 'as numerous as ewes' – to suggest this. A healthy ewe was encouraged to breed frequently; her young would be slaughtered for meat, sold or kept to replenish the herd. In subsistence farming communities, therefore, female animals are of greater value than males and it makes no economic sense to slaughter them. Only females who proved to be infertile were killed for meat or offered as sacrifice. Because of their ability to produce milk and offspring, ewes no doubt received better care than males and had the potential to live twice as long as rams. Herdsmen could therefore have long and lasting relationships with their ewes. In the Hebrew bible (2 Samuel 12. 1–7), Nathan the prophet tells King David the parable of a poor shepherd who bought a ewe lamb: 'he raised it, and it grew up with him and his children. It shared his food, drank from his cup and even slept in his arms. It was like a daughter to him.'

5. The debate between Grain and Sheep

Sumerian cuneiform text, third millennium BCE (after Black et al. 2004)

When, upon the hill of heaven and earth, An spawned the Anuna gods, since he neither spawned nor created grain with them, and since in the Land he neither fashioned the yarn of Uttu (the goddess of weaving) nor pegged out the loom for Uttu – with no sheep appearing, there were no numerous lambs, and with no goats, there were no numerous kids, the sheep did not give birth to her twin lambs, and the goat did not give birth to her triplet kids – the Anuna, the great gods, did not even know the names Ezina-Kusu (Grain) or Sheep.

There was no *muš* grain of thirty days; there was no *muš* grain of forty days; there was no *muš* grain of fifty days; there was no small grain, grain from the mountains or grain from the holy habitations. There was no cloth to wear; Uttu had not been born – no royal turban was worn; Lord Niĝir-si, the precious lord, had not been born; Šakkan (the god of wild animals) had not gone out into the barren lands. The people of those days did not know about eating bread. They did not know about wearing clothes; they went about with naked limbs in the Land. Like sheep they ate grass with their mouths and drank water from the ditches.

At that time, at the place of the gods' formation, in their own home, on the Holy Mound, they created Sheep and Grain. Having gathered them in the divine banquetting chamber, the Anuna gods of the Holy Mound partook of the bounty of Sheep and Grain but were not sated; the Anuna gods of the Holy Mound partook of the sweet milk of their holy sheepfold but were not sated. For their own well-being in the holy sheepfold, they gave them to mankind as sustenance.

At that time Enki spoke to Enlil: 'Father Enlil, now Sheep and Grain have been created on the Holy Mound, let us send them down from the Holy Mound.' Enki and Enlil, having spoken their holy word, sent Sheep and Grain down from the Holy Mound.

Sheep being fenced in by her sheepfold, they gave her green plants generously. For Grain they made her field and gave her the plough, yoke and team. Sheep standing in her sheepfold was a shepherd of the sheepfolds brimming with charm. Grain standing in her furrow was a beautiful girl radiating charm; lifting her raised head up from the field she was suffused with the bounty of heaven. Sheep and Grain had a radiant appearance.

They brought wealth to the assembly. They brought sustenance to the Land. They fulfilled the ordinances of the gods. They filled the storerooms of the Land with stock. The barns of the Land were heavy with them. When they entered the homes of the poor who crouch in the dust they brought wealth. Both of them, wherever they directed their steps, added to the riches of the household with their weight. Where they stood, they were satisfying; where they settled, they were seemly. They gladdened the heart of An and the heart of Enlil.

They drank sweet wine, they enjoyed sweet beer. When they had drunk sweet wine and enjoyed sweet beer, they started a quarrel concerning the arable fields, they began a debate in the dining hall.

Grain called out to Sheep: 'Sister, I am your better; I take precedence over you. I am the glory of the lights of the Land. I grant my power to the *saĝursag* (a priest of the cultic personnel of Inanna) – he fills the palace with awe and people spread his fame to the borders of the Land. I am the gift of the Anuna gods. I am central to all princes. After

I have conferred my power on the warrior, when he goes to war he knows no fear, he knows no faltering (?) – I make him leave . . . as if to the playing field.’

‘I foster neighbourliness and friendliness. I sort out quarrels started between neighbours. When I come upon a captive youth and give him his destiny, he forgets his despondent heart and I release his fetters and shackles. I am Ezina-Kusu (Grain); I am Enlil’s daughter. In sheep shacks and milking pens scattered on the high plain, what can you put against me? Answer me what you can reply!’

Thereupon Sheep answered Grain: ‘My sister, whatever are you saying? An, king of the gods, made me descend from the holy place, my most precious place. All the yarns of Uttu, the splendour of kingship, belong to me. Šakkan, king of the mountain, embosses the king’s emblems and puts his implements in order. He twists a giant rope against the great peaks of the rebel land. He [. . .] the sling, the quiver and the longbows.’

‘The watch over the élite troops is mine. Sustenance of the workers in the field is mine: the waterskin of cool water and the sandals are mine. Sweet oil, the fragrance of the gods, mixed (?) oil, pressed oil, aromatic oil, cedar oil for offerings are mine.’

‘In the gown, my cloth of white wool, the king rejoices on his throne. My body glistens on the flesh of the great gods. After the purification priests, the *pašeš* priests and the bathed priests have dressed themselves in me for my holy lustration, I walk with them to my holy meal. But your harrow, ploughshare, binding and strap are tools that can be utterly destroyed. What can you put against me? Answer me what you can reply!’

Again Grain addressed Sheep: ‘When the beer dough has been carefully prepared in the oven, and the mash tended in the oven, Ninkasi (the goddess of beer) mixes them for me while your big billy-goats and rams are despatched for my banquets. On their thick legs they are made to stand separate from my produce.’

‘Your shepherd on the high plain eyes my produce enviously; when I am standing in stalks in the field, my farmer chases away your herdsman with his cudgel. Even when they look out for you, from the open country to the hidden places, your fears are not removed from you: fanged (?) snakes and bandits, the creatures of the desert, want your life on the high plain.’

‘Every night your count is made and your tally-stick put into the ground, so your herdsman can tell people how many ewes there are and how many young lambs, and how many goats and how many young kids. When gentle winds blow through the city and strong winds scatter, they build a milking pen for you; but when gentle winds blow through the city and strong winds scatter, I stand up as an equal to Iškur (the god of storms). I am Grain, I am born for the warrior – I do not give up. The churn, the vat on legs (?), the adornments of shepherding, make up your properties. What can you put against me? Answer me what you can reply!’

Again Sheep answered Grain: ‘You, like holy Inanna of heaven, love horses. When a banished enemy, a slave from the mountains or a labourer with a poor wife and small children comes, bound with his rope of one cubit, to the threshing-floor or is taken away from (?) the threshing-floor, when his cudgel pounds your face, pounds your mouth, like crushed . . . your ears (?) . . ., and you are . . . around by the south wind and the north wind. The mortar . . . As if it were pumice (?) it makes your body into flour.’

‘When you fill the trough the baker’s assistant mixes you and throws you on the floor, and the baker’s girl flattens you out broadly. You are put into the oven and you are taken out of the oven. When you are put on the table I am before you – you are behind me. Grain, heed yourself! You too, just like me, are meant to be eaten. At the inspection

of your essence, why should it be I who come second? Is the miller not evil? What can you put against me? Answer me what you can reply!’

Then Grain was hurt in her pride, and hastened for the verdict. Grain answered Sheep: ‘As for you, Iškur is your master, Šakkan your herdsman, and the dry land your bed. Like fire beaten down (?) in houses and in fields, like sparrows chased from the door of a house, you are turned into the lame and the weak of the Land. Should I really bow my neck before you? You are distributed into various measuring-containers. When your innards are taken away by the people in the market-place, and when your neck is wrapped with your very own loin-cloth, one man says to another: “Fill the measuring-container with Grain for my ewe!”’

Then Enki spoke to Enlil: ‘Father Enlil, Sheep and Grain should be sisters! They should stand together! Of their threefold metal . . . shall not cease. But of the two, Grain shall be the greater. Let Sheep fall on her knees before Grain. Let her kiss the feet of . . . From sunrise till sunset, may the name of Grain be praised. People should submit to the yoke of Grain. Whoever has silver, whoever has jewels, whoever has cattle, whoever has sheep shall take a seat at the gate of whoever has grain, and pass his time there.’

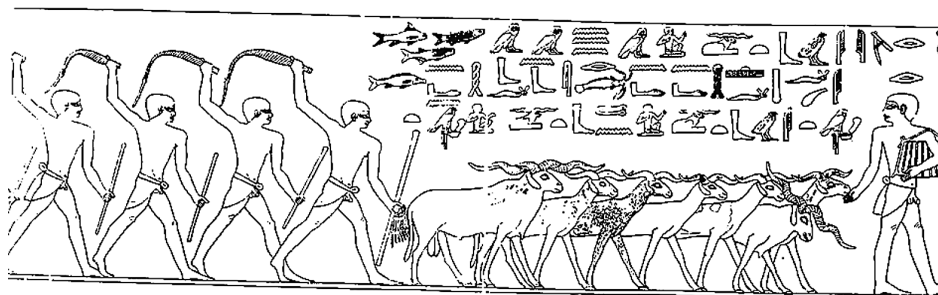
Dispute spoken between Sheep and Grain: Sheep is left behind and Grain comes forward – praise be to Father Enki!

COMMENT: This lively Sumerian poem is typical of the so-called ‘debate genre’, fashionable in early court societies (see HORSE no. 1a; Vanstiphout 1991). It tells a creation myth of a time before sheep and grain were known to mankind. Until then the earth appeared barren and people went naked, eating grass and drinking water from ditches. The gods kindly created sheep and grain to give humankind sustenance. After drinking too much beer, the (female) personifications of Sheep and Grain begin quarrelling about the comparative benefits of each to the human race. Sheep declares that she is the most beneficial because she provides humans with milk, and wool, and skin, and even fat with which they can make perfume; Grain counters the argument, stating that she provides bread and beer and even the fermented mash made in the brewing process which is used for feeding sheep. Recognising the valuable qualities of both Sheep and Grain, the god Enki, Lord of Wisdom, nonetheless pronounces Grain to be the winner – implying that humankind could get by without milk, wool and skins, but would starve for want of bread.

A similar story of opposition underpins the story of the quarrelsome brothers Cain and Abel in the Hebrew bible (Genesis 4.1–16). Abel is a pastoralist and cares for his herds and flocks while Cain is a farmer. While their conflict does not arise from their vocations *per se*, their desire to provide Yahweh with the best offering – grain or animal fat (suet) – sets them at odds. The Sumerian tale of Dumuzi and Enkimdu also operates around the theme of a shepherd and a farmer competing to offer a deity (in this case Ishtar) the best gifts they can muster.

6. Trampling the seed

*Egyptian tomb relief, tomb of Ti at Saqqara,
V Dynasty (after Wild 1953: pl. 113)*



COMMENT: Scenes of seed-sowing are regularly found in Old Kingdom tombs. Often the seed-ing takes place in front of flocks of sheep, such as these hairy, thin-tailed, corkscrew-horned types: domestic sheep were used to tread the newly sown grain into the earth. The flock is depicted in an orderly line-up of overlapping sheep – only one animal, with its head lowered, shows any sign of variation. The flock is made up of two rams and five ewes (the biggest flock depicted in such a scene numbers fourteen, though in reality more may have been used). Herders drive the sheep forward with sticks while, at the front, a man encourages them to move with the aid of food. The inscription, as is typical of these scenes, reads in part: ‘Cultivating with a flock of sheep.’

7. Sheepfolds and shepherds

a) Hebrew bible, Zephaniah 2.5–6

Woe to you who live by the sea,
you Kerethite people;
the word of the Lord is against you,
Canaan, land of the Philistines.
He says, ‘I will destroy you,
and none will be left.’
The land by the sea will become pastures
having wells for shepherds
and pens for flocks.

Habakkuk 3.17–18

Though the fig tree does not bud
and there are no grapes on the vines,
though the olive crop fails
and the fields produce no food,
though there are no sheep in the pen
and no cattle in the stalls,
yet I will rejoice in the Lord,
I will be joyful in God my Saviour.

Micah 2.12–13

I will surely gather all of you, Jacob;
I will surely bring together the remnant of Israel.
I will bring them together like sheep in a pen,
like a flock in its pasture;
the place will throng with people.
The One who breaks open the way will go up before them;
they will break through the gate and go out.

b) Hebrew bible, Genesis 31.38–41

I have been with you for twenty years now. Your sheep and goats have not miscarried, nor have I eaten rams from your flocks. I did not bring you animals torn by wild beasts; I bore the loss myself. And you demanded payment from me for whatever was stolen by day or night. This was my situation: The heat consumed me in the daytime and the cold at night, and sleep fled from my eyes. It was like this for the twenty years I was in your household. I worked for you fourteen years for your two daughters and six years for your flocks, and you changed my wages ten times.

c) New Testament, John 10.1–10

‘Very truly I tell you Pharisees, anyone who does not enter the sheep pen by the gate, but climbs in by some other way, is a thief and a robber. The one who enters by the gate is the shepherd of the sheep. The gatekeeper opens the gate for him, and the sheep listen to his voice. He calls his own sheep by name and leads them out. When he has brought out all his own, he goes on ahead of them, and his sheep follow him because they know his voice. But they will never follow a stranger; in fact, they will run away from him because they do not recognize a stranger’s voice.’ Jesus used this figure of speech, but the Pharisees did not understand what he was telling them.

Therefore Jesus said again, ‘Very truly I tell you, I am the gate for the sheep. All who have come before me are thieves and robbers, but the sheep have not listened to them. I am the gate; whoever enters through me will be saved. They will come in and go out, and find pasture. The thief comes only to steal and kill and destroy; I have come that they may have life, and have it to the full.

‘I am the good shepherd. The good shepherd lays down his life for the sheep. The hired hand is not the shepherd and does not own the sheep. So when he sees the wolf coming, he abandons the sheep and runs away. Then the wolf attacks the flock and scatters it. The man runs away because he is a hired hand and cares nothing for the sheep.

‘I am the good shepherd; I know my sheep and my sheep know me – just as the Father knows me and I know the Father – and I lay down my life for the sheep. I have other sheep that are not of this sheep pen. I must bring them also. They too will listen to my voice, and there shall be one flock and one shepherd. The reason my Father loves me is that I lay down my life – only to take it up again. No one takes it from me, but I lay it down of my own accord. I have authority to lay it down and authority to take it up again. This command I received from my Father.’

d) Akkadian shepherd's contract (after Postgate 1992: 160)

92 ewes; 20 wethers; 22 young sheep; 24 lambs; 33 nanny-goats; 4 billy-goats; 27 kids.
Total 158 sheep, 64 goats, which Sin-Šamuh has entrusted to Dada the shepherd. He takes liability for all of them, and will replace any lost animal. If Nidnatum his shepherd boy makes off, he will be responsible for the loss. Dada will pay the boy 5 *gur* of grain. (3 witnesses. 18th day of 4th month, Samsu-iluma Year 1).

COMMENT: One of the reasons why sheep were so widespread throughout the Near East and Egypt is the fact that besides supplying humans with wool, dairy products and skins, they are well-adapted to complement agriculture (Borowski 1998: 51–61, 66–71): they can graze on the fringes of cultivated lands, encourage plant growth and, with the owner's permission, could even graze on growing cultivated crops, as is made clear in the Code of Hammurabi (§57). Most small farmers had a flock of sheep and goats which would have been led out to graze on the village lands on a daily basis, and brought home in the evening but in the summer larger flocks could wander far from home, under the care of a professional shepherd.

Generally located near the home of a sheep-owner or on the hills where the sheep grazed, a sheepfold in ancient Israel and throughout the Near East was a roofless stone wall-enclosure accessed through one portal. It was intended to protect the sheep from inclement weather, wild animals and thieves. As a series of Sumerian proverbs have it: 'Like an ox to your stall, like sheep to your fold . . . When you raise the head like a sheep to the sheepfold, the shepherd Dumuzi will rejoice' (Kramer 1956: 296). One sheep pen could house several flocks, each of which could be identified by a shepherd because of the relationship developed between them.

Numerous contracts survive across the Near East between sheep-owners and shepherds. Remarkably, the terms of the contracts often acknowledge that the shepherd acted beyond the owner's control, although an honest, hardworking shepherd like Jacob might feel disgruntled by the treatment he received at the hands of his employer (b, above). A shepherd's wages tended to be the by-products of the flock, mainly a percentage of the wool or milk; tradition also ensured the shepherd a clothing allowance and regular food rations (Postgate 1992: 160). In the Hebrew bible, Jacob opts to take his 'wages' in kind: the multi-coloured sheep of the flock (above no. 4). Shepherds were responsible for the loss of any sheep, although contracts tended to differentiate between losses incurred through disease and those brought about by lion-attack (Postgate 1992: 161; Wenham 1994: 277).

8. The voice of the sheep

Hebrew bible, Psalm 23.1–4

Yahweh is a shepherd to me;
therefore there is nothing I lack.
In grassy pastures he lets me lie, chewing the cud,
down to quiet waters he leads me.
He revives my life;
he leads me by the right paths –
all to uphold his reputation.
Even when I walk through a dark valley,
I fear no harm, for you are with me;
your crook and your staff are my reassurance.

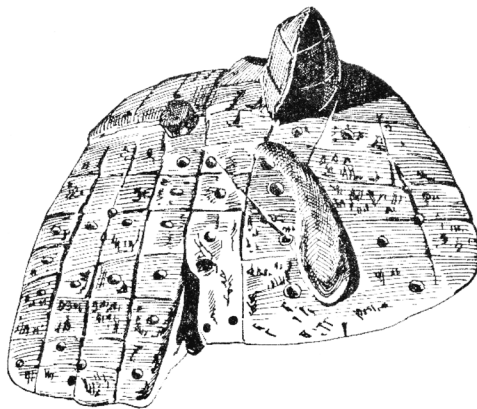
COMMENT: This is the most famous of the Hebrew psalms and one of the best known texts from antiquity. Less recognised is the fact that the ‘speaking voice’ in the psalm is that of a sheep; the human voice that articulated this hymn in the temple therefore represented himself (or possibly herself) as this animal. The metaphor of the sheep grazing contentedly and safely in grassy pastures, or being led by the shepherd along the correct paths, and walking through a dark valley taking comfort from the shepherd’s tools – the crook and the staff – is richly drawn (for a full analysis of the metaphor in the complete Psalm 23 see Clines 2010).

The metaphor of shepherd and sheep exerted a powerful influence across the ancient Near East and was regularly used to describe the relationships between gods and mortals (Porter 1985: 69–118). A close parallel to Psalm 23, for instance, comes from a Sumerian proverb: ‘A man’s personal god is a shepherd who finds pasturage for him. Let him lead him like a sheep to the grass they can eat’ (Alster 1997: (I) 102, no. 134). A hymn to the Assyrian sun god Shamash addresses him in similar, if more glorified, terms: ‘You shepherd all living creatures together, you are their herdsman, above and below’, while the Egyptian sun god Re is the ‘Brave protector who tends his flocks’.

Near Eastern royal imagery also frequently cast the king in the role of the shepherd of his people: the Israelite King David was a shepherd-ruler *par excellence*, a man whom Yahweh ‘took . . . from the sheepfolds . . . to be shepherd of . . . his people’ (Psalm 78. 70) and the Hebrew conception of the Persian ruler, Cyrus the Great, likewise depicted him in the same light (Isaiah 44. 28). The shepherd image was effectively used of Sargon II of Assyria: ‘May the king, my lord, the good shepherd . . . truly tend and shepherd them (his people). May Ashur, Bel, and Nabu add flocks to your flocks, give them to you, and enlarge your spacious fold; may the people of all countries come into your presence!’ (Tomes 2005: 79). Rooted deep in the sheep–shepherd relationship, the image of the shepherd-king stresses his care and compassion for his people and, simultaneously, the dependence of the people on the ruler to meet their needs. In addition, the metaphor of people as sheep emphasises their passivity – an ideal state-of-being in ancient royal ideology, because it was wilfulness and disobedience of the people that kings most feared. This helps explain the Egyptian pharaoh’s use of the crook and the flail as part of his royal regalia.

9. Sheep liver augury

*Clay model of a sheep’s liver, Old Babylonian period,
c. 1900–1600 BCE; probably from Sippar, southern Iraq
(London, British Museum ME 92668)*



COMMENT: Across the Near East people believed in the efficacy of the liver omen, a ritual act in which a sheep was slaughtered, cut apart, and liver and lungs then ‘read’ by a specialist priest known as a *baru* (Koch 2000). Any question put to the priest could be answered through the careful observation of the shape, size, colour and markings found in and on the sheep’s liver and lungs which were then interpreted accordingly. The British Museum liver model (one of several found throughout the area of the Near East) was carefully divided into sections with squares and holes while the clay was still fresh. Cuneiform texts alongside each grid mark suggest the meaning of a specific omen. The act of *barîtu* (extispicy as divination from sheep’s entrails) was therefore a high-status function in Mesopotamian religious society. Textual evidence reveals the *baru* to have been one of the foremost scholars and courtiers in Mesopotamian societies, playing a crucial role in royal and governmental decision-making. No military campaign, building work or appointment to office was ever done without first consulting the *baru* and the sheep liver and lungs.

A very similar bronze model of a sheep’s liver, inscribed with the names of Etruscan deities and used for extispicy in exactly the same way, was discovered at Piacenza and is now in the museum there; it strongly suggests a Mesopotamian influence on the development of Etruscan religion, as with the story of Samson and the foxes (Rasmussen 2002; see FOX no. 3).

10. Ten thousand sheep at Knossos

Knossos Tablets (series D), c. 1300 BCE

Da 1135 +7182			
u-ta-jo-jo		wethers 100	
ke-to, *56-ko-we			
Da 1162			
we-we-si-jo			
e-ro-u-ta, su-ri-mo		wethers 200	
Db 1155+5378 +5688			
we-we-si-jo		wethers 86	ewes 14
wi-jo-ka-de, da-wo			
Dk 1074			
	X	wethers 100	wool 19
e-ru-to-ro, ku-ta-to			wool deficit 6
Dl 938			
]re-jo	ewes 50	lambs 40	wool 7
		lambs deficit 10	wool deficit 3
Dm 1175+1456			
a ₃ -mi-re-we (= in enclosure)		wethers 4	
ra-su-to, e-ka-ra-e-we (= for fattening)		wethers 10	
Dn 1094 +1131			
pa-i-to (= Phaistos)		wethers 1509	
da-wo		wethers 2440	

COMMENT: The archives of Linear B tablets from Knossos on Crete and Pylos in the Peloponnese record the administration of a complex economic system in Bronze Age Greece centred on the palaces which controlled agricultural and industrial production. Written records

were kept of all aspects of palace organisation, from gathering foodstuffs and distribution of rations to lists of swords and chariots, and of the slaves and dependants who carried out the work (Rougemont 2009). Many of the tablets record animal husbandry, and this small selection gives a flavour of the organisation of sheep farming for wool in Mycenaean Crete. Annual records were kept of flocks pastured, targets for wool production and the deficit if the target had not been reached. Each tablet records a single flock, naming the shepherd responsible for the flock and the place of pasture, and the 'collector' who oversaw the tribute required of the flock. Individual collectors and shepherds from particular regions can be traced through the years (Rougemont 2004). In the examples above the first three tablets list different kinds of flock – wool flocks, consisting of wethers (castrated male sheep, which were best for wool production), pastured in round numbers, and a mixed flock of wethers and ewes; there were also breeding flocks of ewes and lambs. The next two tablets show the targets expected of different flocks, in wool and in lambs: wethers were expected to produce wool at a ratio of one unit per four sheep, while ewes were expected to produce one lamb each, and one unit of wool per ten sheep. Small numbers of sheep were kept separately in enclosures for eating, and this is recorded in the sixth tablet. Finally, a tablet gives summary figures for each region. The evidence of the tablets demonstrates that tens of thousands of sheep were kept, documenting a substantial wool industry creating textiles for export.

11. An attentive shepherd

Homer, Odyssey IX.216–49, 437–61

We came swiftly to the Cyclops' cave, but we did not find him there, for he was pasturing his plump flocks in the meadow. We went into the cave and examined everything there: there were stands loaded with cheese and pens full of lambs and kids, separate ones for each age group: one for the first-born lambs, another for the younger-born and another for the newborn. And there were all kinds of vessels for milking, pails and tubs, all full of whey. At this point my companions wished to take some of the cheeses and leave, driving some of the lambs and kids from the pens back to the swift ship and setting sail once more over the briny sea. But I would not let them, though it was much the worse decision, because I wished to see the Cyclops and receive his hospitality. But he was not fated to be a welcoming guest for my companions. Therefore we kindled a fire, took some of the cheeses and ate them, first offering a portion to the gods; and we settled to wait until the Cyclops returned from the pastures with his flocks.

He brought a great bundle of dry wood to make a fire for his supper, which he cast down with a crash inside the door, and we, in fright, shrank back into a recess of the cave. Then he brought part of his plump flocks into the wide cave, all those for milking, but he left the rams and billies outside in the broad courtyard. Then he closed the mouth of the cave with a huge stone, so big that two and twenty strong wagons would not be able to move it, such was the size of it. Then he sat down and milked the ewes and bleating nannies, each in the right order, and put the lambs or kids under each one. Half of the white milk he curdled, gathered and put into woven baskets to drain, and the other half he put by in pails for himself to drink for his evening meal.

[The Cyclops then eats some of Odysseus' men, Odysseus blinds him and hides himself and his men under the sheep in order to escape.]

When dawn broke, the rams streamed out to their pasture, and the ewes bleated unmilked among the folds, their udders swollen full. Their master, racked with dreadful pains, felt along the backs of the sheep which stood before him, but, foolish, he did

not realise that my companions were hidden under the bellies of the fleecy sheep. Last of all the leader ram came to the cave entrance, carrying both his own weighty fleece and myself, crafty Odysseus. Rubbing his back, the mighty Polyphemos spoke to him: 'Beloved, ram, why do you come last of all the flock from the cave? Never before have you come last behind the sheep: you were always first to make your way proudly to the meadows to crop the flowers, first to drink at the flowing stream, and first to return to the fold at evening. And now here you are last of all. Perhaps you are grieving for your master's eye, destroyed by that brigand and his baneful companions while my wits were befuddled by wine, that No-one on whom I swear I will have my revenge. If only you had a voice to share your thoughts with me and tell me where he is hiding from my wrath. Then I could dash him to the grounds and scatter his brains across the cave, and my heart would gain some relief from the evils which this worthless No-one has caused for me.' So saying he sent the ram on through the doorway.

COMMENT: The story of Odysseus' encounter with the Cyclops Polyphemos is a gruesome tale of cannibalism and blinding, but contains within it an account of how Polyphemos tends his sheep and goats. The Cyclopes are characterised as a primitive and lawless people, and this is reflected in their agriculture: they do not grow wheat, but rely on pastoralism for their diet, drinking milk and eating cheese (see Columella below). The poem is unusual for giving a detailed description of sheep husbandry and milk-processing – the ewes are pastured separately from their lambs during the day and milked on their return home, after which they are stabled with their lambs: the milk that is not drunk immediately is curdled to make soft cheese, drained in rush baskets and dried on racks. Immediate processing of milk was necessary in a hot climate and most cheese seems to have been of a soft ricotta type rather than hard cheese. Polyphemos is also interesting for the affectionate relationship which he has with his flock: he is aware of the animals' self-imposed hierarchy, milking them in the appropriate order, and he speaks directly to his favourite ram, noting its unusual behaviour in lagging behind the ewes, and imagining that it might feel sympathy for its master. Despite the emphasis on the Cyclopes' cruelty and barbarism, the bond between shepherd and sheep is evident, much more so than among the Greeks, whose only impulse is to slaughter and eat the sheep.

12. The sacred sheep of Apollo

OGIS 345, 102/1 BCE

To the God. Good fortune.

In the archonship of Kleodamos son of Kleon, when Kleander son of Timon and Ddamokrates son of Teison were *bouleutes* for the first half-year, and Nikias son of Kleon was secretary to the council, it was decreed by the *polis* of Delphi, in a full assembly, with a quorum of voters: since King Nikomedes son of Nikomedes and Queen Laodike daughter of King Mithridates act with reverence towards the god and are benevolent to the city of Delphi, so that when the city sent as ambassadors to ask for slaves for the god and for the *polis* [Aristokles son of Herakon and Hybrias son of Xenon], acting in a manner worthy of themselves and their ancestors, they promised the slaves. And they did indeed send them, instructing their representative Bias to supply them for the god and for the *polis*, and Bias presented them through the above-mentioned magistrates in the assembly, thirty slaves, which the *polis* decided to assign [as follows . . .] and to give to the treasurers Kleon son of Herys and Tarantino[s son of Dromokleides for]

the care of the sacred ewes five slaves, whose names are [now . . .]sion, Phosphoros, Hierokles, Heliodoros and Ion; and for the sacred she-goats [to . . . son of . . .]sitheos, Menon, Doros, Rhodon, Hippias and Lykeas; and for the care of [the sacred cows] to Theoxenos, Hypatodoros, Onasimos, Nikephoros and Demetrios; and for the care of the [sacred] mares to [. . .] son of Kallias and Astoxenos son of Dionysius, Kerdon, Parnassos, Nymphon [and . . .] . . .

COMMENT: Sacred sheep in ancient Greece were not exotic ‘treasures’ belonging to a specific deity like the white mice of Apollo at Hamaxitus (MOUSE no. 8) or the guinea-fowl of Artemis at Leros (Athen. *Deipn.* 655a–e): they were flocks that were grazed on the land belonging to the temple. The inscription above is one of several which attest to herds of sacred sheep, goats, cows and horses belonging to the temple of Apollo at Delphi (Rousset 2002: 192–205), and similar epigraphic evidence indicates that sacred sheep were also kept at his temple on Delos (Isager and Skydsgaard 1992: 193–5). One might assume that these flocks were kept as a supply of animals for sacrifice: the fact that the terms used denote female animals, and hence breeding flocks, seems to support this. While sheep were rarely raised purely for meat, their rapid reproduction meant that they provided a good supply of animals for sacrifice; sheep were the most commonly sacrificed animal in classical Greece (Isager and Skydsgaard 1992: 93, 175–7). But the presence of a sacred horse herd at Delphi means that sacrifice cannot have been the only purpose of the sacred flocks, since horses never formed part of public sacrifice in Greece. Instead, it seems that the temple drew an income from the wool produced by the temple flocks, as well as profiting from the sale of these and other animals. Sheep were also rented out, along with temple-owned lands, to tenants who would care for them in return for their milk, and perhaps a share of the wool (Isager and Skydsgaard 1992: 195). In religious terms, while sheep were sacrificed and eaten in large numbers, they were not seen as particularly divine animals: they were under the protection of Hermes (see Calder 2011: 32–3) but rarely appear in religious imagery. Aelian records one tantalising reference to the story of a sheep on Samos which ‘found some stolen gold’ and was rewarded with a cult (*NA* XII.40), but offers no further details. No doubt the ubiquity and relatively low status of sheep made them seem too unimportant to figure as companions of the gods.

13. Sheep in the pastoral landscape

Longus, Daphnis and Chloe I.7–10

The two children soon grew up, and came to be more beautiful than their rustic companions. One night when Daphnis was fifteen years old and Chloe thirteen, [their fathers] Dryas and Lamón were visited by the same dream: the Nymphs appeared to them, the same ones as in the cave from which the stream issued, where Dryas found the baby Chloe, and they handed Daphnis and Chloe over to a handsome and disdainful young boy who had wings on his shoulders and carried a small bow and arrows. This boy touched both of them with one of his arrows, and bade Dryas and Lamón send Daphnis and Chloe as shepherds, he to herd the goats and she the sheep.

Having received this dream Dryas and Lamón were grieved to think that their children should become goatherds and shepherds, when they had hoped, from the tokens found with them in infancy, for a better fate for them. For that very reason they had brought them up on a finer diet and taught them their letters and all other things above their rustic station. But even so they believed that they should obey the goddesses’ will for the children whom they had saved.

So, after discussing the dream among themselves and sacrificing in the shrine of the Nymphs to the winged boy, whose name they did not know, they sent Daphnis and Chloe out as shepherds with the flocks, instructing them on each point: to graze the sheep before midday and to take them to fresh pasture when the day's heat cooled; when to take them to drink and when to bring them back to the fold; on which animals to use the crook, and which to herd by voice alone. Daphnis and Chloe were delighted with their task, as though they were commanding a great empire, and they loved their sheep and goats even more than the normal way of shepherds, she because she owed her rescue as a baby to a ewe, and he because he remembered that he had been nursed by a she-goat.

It was the beginning of spring when all the flowers were in bloom, in the woods, in the meadows and on the mountains. The bees were humming, birds were singing and lambs were gambolling: the lambs skipped on the mountains, the bees hummed in the meadows and the birds sang in the thickets. And as everything was filled with such springtime joy, Daphnis and Chloe, young and tender as they were, imitated the creatures that they saw. They sang together with the birds, danced with lambs in the fields, and like the bees plucked flowers to toss at each other, or to wind into garlands for the Nymphs. Everything they did, they did together, grazing their flocks side by side; often Daphnis would gather up Chloe's sheep which had strayed, and often Chloe would drive the bolder of Daphnis' goats away from the crags. And sometimes one of them took care of both flocks while the other was at some amusement.

Their games were those of shepherds and children: Chloe, plucking stalks as she wandered here and there, wove a cage for a cricket, so intent on her task that she forgot her sheep, while Daphnis cut slender reeds and made holes at their joints, binding them together with soft wax; then he cared for nothing but piping all day long. They shared their milk and wine, and the food which they brought from home; and you would as soon see the sheep and the goats scattered and separated than Chloe without Daphnis.

COMMENT: The sheep was the animal most often depicted in the ideal country landscape: Roman wall-paintings often placed grazing flocks in the background of their pastoral scenes, and in literature the shepherd with his or her flock, playing the pipes under a tree on an endless sunny afternoon, came to symbolise the attractions of bucolic life (e.g. Theoc. *Idylls*, Virgil *Eclogues*). Sheep no doubt took on this role because they are in general peaceful and biddable animals, unlike the livelier and more wily goat, but the idealisation of shepherding, most marked in the extract from Longus' novel above, does little justice to the truth. Daphnis and Chloe here tend small flocks, taking them out to graze each day and returning home at evening, but in reality many shepherds were slaves who spent the whole summer out on the mountains, living in isolated huts with few comforts (Soph. *OT* 1132–40; Frayn 1984: [ch. 4](#)). Chloe's minimal duties extend only to protecting her sheep from straying, but because sheep need human protection against predators, Varro (*IL*.10.3) recommends that hardy men who know how to throw the javelin be chosen as shepherds, and Livy (*IX*.36.6) refers to the typical weapons of the herder as the sickle and spear. A shepherd in Sophocles' fragmentary play *Poimenēs* (*Shepherds*) comments that though the shepherd is master of the flock, he is also a slave to the sheep (fr. 505), and Calder (2011: 26) makes the point that the unpleasant yet essential tasks of sheep management such as checking for fly-strike, treating diseases and assisting with lambing are absent from the pastoral vision. This is certainly true of the diseases of sheep discussed extensively by Columella, which include scab, erysipelas, boils caused by parasites, ulcers and bloat (*De re rust.* VII.5).

14. Breeds of sheep

Columella, De re rustica VII.2

While the sheep is of secondary importance to the ass, it takes first place if one considers the utility of its products: for the sheep protects us from the cold and clothes our bodies, provides both cheese and milk in abundance for peasants, and adds many tasty dishes to the dining-tables of the discerning. Indeed some peoples who do not grow corn live entirely from their sheep, and for this reason very many tribes of the Nomads and the Getae are called 'Milk-drinkers'. Although sheep are, as Celsus authoritatively states, rather sensitive, their health is generally good, and they are not subject to infectious diseases. Nevertheless a breed must be chosen to suit the location where they are to be raised. . . . Fertile lowlands are best suited for raising tall sheep and wooded slopes for small breeds; meadows and flat fallow fields best suit jacketed sheep. Similarly one should consider not only the type of sheep, but also their colour. In the past the best breeds were considered to be the Calabrian, Apulian and Milesian, and of these the Tarentine was most esteemed. At present Gallic breeds are the most prized, and of these particularly those from Altinum, and those which are raised on the barren plains around Parma and Mutina. White is the best colour and also the most useful, since many other colours can be made from it, but white cannot be made from any other colour. But brown and black sheep which are raised in Italy around Pollentia and in Baetica at Corduba are also valued for their colour, and likewise the Asian tawny sheep which are called 'Erythraean'. It has also been shown how to produce other kinds of colour in sheep; once, when a group of fierce wild rams of a remarkable colour had been brought across from Africa to the town of Gades, along with other wild animals for supply to the games, my uncle Marcus Columella, a man of inquiring intellect and a widely-famed farmer, bought them and transferred them to his estate, where he tamed them and then crossed them with soft-woolled ewes. The ewes bore lambs of the same colour as their sires, though with coarse wool, but when these were then crossed again with Tarentine ewes they produced rams with softer wool. All the sheep descended from these then retained their fathers' colour and the soft fleece of the maternal line. Columella used to say that by this method a wild animal's appearance could be maintained in its offspring while its ferocity was bred out.

COMMENT: To speak of 'breeds' of sheep in the ancient world is to invite misconception, since breeds in the modern sense did not really exist. Ancient agricultural writers make distinctions of several kinds in sheep types: between coarse- and fine-woolled sheep, between fat-tailed and thin-tailed sheep, and (as here) between large and small types. The first of these was the most significant: the fine-woolled sheep seems to have been introduced to Greece from Asia Minor, and from there via the Greek and Phoenician colonies to Italy and Spain (Ryder 1983: 141–2). These are the Tarentine (Greek) sheep to which Columella refers, and the kind which were sometimes raised 'jacketed' (see below). The 'fat-tailed' sheep of the Middle East, adapted to store fat in the tail as a survival mechanism, excited the interest of Greek writers: Herodotus comments on them as peculiar to Arabia (III.113) and Aristotle to Syria (*HA* 606a 13–14), but they were not found in the Mediterranean. Columella's distinction of size is not repeated elsewhere, but seems to indicate some distinction between smaller and hardier upland sheep and larger lowland ones. The discussion of colour is more difficult to interpret, particularly as sheep in ancient art are universally shown as white: it is clear from Pliny's discussion of coloured fleeces (*NH* VIII.191) that there is no distinction made of breed – most of those he names are fine-woolled Tarentine

sheep – but simply local variations in colour. Columella's final story about his uncle's breeding experiments with African wild sheep is one of the clearest accounts in antiquity of selective breeding, attempting to bring desirable wild traits into domestic stock. Ryder, however, finds the story problematic because colour is not usually dominant in sheep, so the idea that all the lambs would breed true to their sire is unlikely (1983: 169). There is in fact a long tradition of concern among the agricultural writers, going back to Aristotle, that a white ram might produce coloured or spotted offspring (Varro, below; Virgil, *Georg.* III. 387–90; Pliny *NH* VIII.189; Arist. *HA* 574a 5–8), which is more consistent with experience.

15. Sheep husbandry

Varro *De re rustica* II.2.2–4, 7–12, 18–19; II.11.6–9

Atticus, who at that time went by the name of T. Pomponius, but is now known as Q. Caecilius) said, 'Since you seem to be looking to me, I shall begin and discuss the earliest of herd-animals, the sheep. For they say that sheep were the first wild animals to be caught and tamed by mankind. In the first place you should buy good ewes, of the right age, neither old nor too young, since the former can no longer bring a profit and the latter are not yet able to. But it is better to buy young sheep, which at least offer hope for the future, than old ones which will soon die. In form a sheep should be large in body with thick, soft fleece, the hairs long and dense all over, particularly around the neck and shoulders, and the belly too should be woolly. Those which have bare bellies our ancestors called "*apicas*" and rejected. The legs should be short, and the tail long in Italy but short in Syria. You should take particular care to acquire a flock from sound stock, which can be judged with reference to two factors: appearance and offspring. A good breeding ram will have a forehead well covered with wool, horns curving down towards the muzzle, grey eyes and fleecy ears, and be broad in the shoulders, chest and haunches, with a long wide tail. You should check that the ram's tongue is neither black nor spotted, because rams which have this characteristic sometimes sire black or spotted lambs. And the quality of the stock can also be judged from the lambs themselves, if the offspring are handsome.

[. . .]

In the first place you should see to it that the sheep feed properly over the whole year, indoors and out; the fold should be in a suitable place, sheltered from the wind, and with an eastern aspect rather than a southerly one. Where the sheep are stabled, the ground should be clear and sloping, so that it can be easily swept out and made clean; if the ground is damp it is damaging to the wool, and also the sheep's hooves, and can lead them to contract the scab. If they are to be stabled for several days at a time, you should spread brush for them, to make the ground softer to lie on and keep them clean: this way they will eat with better appetite. There should also be a separate enclosure in which the pregnant ewes and sheep which are ill can be kept. These instructions bear on sheep kept on the farm: on the other hand, for those which are pastured on the slopes, far from shelter, hurdles or nets should be sent with them from which enclosures can be made in the open country, and all other necessary equipment, for sheep are grazed far and wide in different places, often spending the summer many miles from their winter steading. 'I have first-hand experience of this,' I said, 'for my flocks used to winter in Apulia, but in the summer went up to the Reatine mountains, with the public droving-roads acting (so to speak) as the yoke uniting two baskets.'

'But even when sheep are kept in the same region, they should be treated differently according to the season: in summer they should go out to pasture at daybreak so that they can crop the dewy grass, which is better than the drier grass at midday. When the sun is up they should be herded to drink, as this gives them a better appetite when they return to pasture. In the midday heat they should be driven under shady crags or spreading trees until it becomes cooler. In the evening they should graze again until sundown. The flock should graze facing away from the sun, for sheep have very sensitive heads. Shortly after sunset they should be taken to drink again, and graze until it is fully dark: the grass regains its savour for them at this time. This regime should be followed between the rising of the Pleiades and the autumn equinox. It is good to pasture sheep in the fields after harvest, for two reasons: because they will eat their fill of the fallen ears, and their trampling of the straw and their dung will improve the crop the following year. Feeding over the rest of the year, in winter and spring, is different, because after the frost has lifted the sheep are driven out to the fields and graze for the whole day, and it is enough to take them to water once a day at noon.

[. . .]

'Jacketed' sheep should be treated in the same way: these are sheep which are given jackets of skins on account of the fine quality of their wool, like the Tarentine and Attic breeds, so that their fleece does not become dirty, which makes it much less easy to dye, or to wash and bleach. Much greater care must be taken with these sheep than with coarse-woolled sheep that the folds and stables are kept clean; therefore they are given stone floors to stand on, to prevent urine collecting anywhere in the stable. Jacketed sheep are fed on whatever fodder they prefer, such as fig leaves, chaff, grape skins or bran, but given in moderation, so that they neither under- nor overeat, both of which prevent their putting on weight; the best foods are snail-clover and medick, which fatten them readily and encourage milk.

[. . .]

When shearing sheep, the first thing before you begin is to check whether the sheep have scab or sores, since if they do, these should be treated before starting to shear. The season for shearing is between the spring equinox and the solstice, when the sheep begin to sweat – for this reason newly-sheared fleece is called 'sappy'. Sheep which have been sheared should be anointed on the same day with a mixture of wine and oil, and some add to this white wax and pig fat; if the sheep are usually jacketed, their jackets are rubbed on the inside with the same mixture and replaced. If a sheep is cut during shearing, the place should be smeared with liquid pitch. Coarse-woolled sheep are sheared around the time of the barley harvest, or elsewhere before the hay is mown. Some farmers shear their sheep twice a year, as in Hispania Citerior, shearing every six months; they undertake the extra work because they think that this produces more wool, on the same principle as those who cut their meadows twice annually. The most careful shearers do their work over mats spread on the ground, so that no clumps of wool may be lost. Shearing should be done on a still day, from the fourth to the tenth hour; if sheep are sheared in the heat of the day their sweat makes the wool softer and heavier and gives it a better colour.

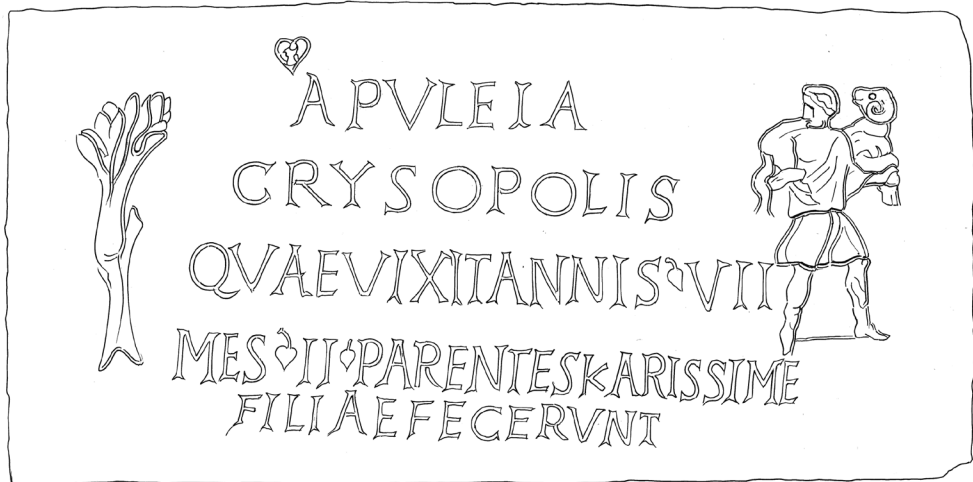
Fleeces which have been removed and rolled up are called '*vellera*' by some and '*velimna*' by others, from which terms one can deduce that the plucking of wool was discovered before shearing. Those people who still pluck their sheep keep them unfed for three days beforehand, because when the sheep are weak the roots of the wool yield more easily.

COMMENT: The advice Varro gives about sheep husbandry is similar in content to that of Columella, but envisages sheep farming on a larger scale, moving flocks along long-distance droving trails to the mountains for the summer, attended by slave shepherds. These trails (*calles publicae*) were under the supervision of the state – Caesar was awarded the proconsulship of *silvae callesque* (woods and droving-roads) in 59 BCE (Suet. *Jul.* 19; see Frayn 1984: ch. 3). As in Greece, sheep were raised primarily for wool, not meat (though Columella (VII.3.13) says that on an estate close to town surplus lambs can be sent to market, and Virgil (*Georg.* III.394–403) refers to sheep for milking. But it is telling that Pliny's discussion of sheep (*NH* VIII.187–99) concentrates less on the animals themselves and more on types of wool and the different kinds of cloth made from them – regional specialisms with fancy patterns and weaves existed, as well as the making of felt: Pliny claims that properly-made felt is strong enough to resist steel and even fire (*NH* VIII.192), but its primary purpose as a waterproof material for clothing.

Varro's description of sheepshearing is one of very few which have come down to us: some examples of Roman shears (*forfices*) have been found (White 1967: 119–20), but it is not clear whether shearing was carried out by professionals or done by the shepherd: Varro seems to imply that it was done by the farmer, but a fable in the Aesopic tradition (Perry 212) about a widow who owned a single sheep suggests that professional shearers did exist. Newly sheared raw wool with the lanolin still in it (*lana sucida*, 'sappy' or 'juicy' wool) was considered a sovereign remedy (XXIX.30–4), and the lanolin (*oesypum*) was sometimes boiled out for use as a medicine (35–7).

16. The Good Shepherd

Tombstone of Apuleia Crysopolis, catacomb of San Callisto, Rome, third century CE (drawing by Tessa Rickards)



Inscription: Apuleia Crysopolis, who lived seven years and two months. Her parents set up [this memorial] to their beloved daughter.

COMMENT: The poignant tombstone of Apuleia Crysopolis covered the niche in the catacomb where her bones were deposited, and the decoration which accompanied the inscription recording her name and age indicates that she belonged to an early Christian community. On one side is the Tree of Life and on the other a representation of Christ as the Good Shepherd, holding a ram on his shoulders.

The significance of the sheep in early Christianity has several different roots. As Gilhus (2006: 168–9) notes, sheep were commonly used in rabbinical teaching, and thus figure in many New Testament parables such as those of the lost sheep (Matthew 18.12–13) and the good shepherd (John 10.1–18). Later there came to be an explicit parallel drawn between Christ and the sacrificial lamb (e.g. John 1.29). But representations in art were also strongly influenced by the Greek and Roman artistic tradition. One of the earliest forms of sculpture is the *kriophoros* figure, a ritual figure of a man bringing a ram on his shoulders for sacrifice: this was common in Greek sculpture, and had its roots in Near Eastern imagery (Frayn 1984: 81–4). Pastoral scenes of shepherds with their sheep were frequent in Roman wall-painting and on sarcophagi, and the *kriophoros* was adapted into the figure of the caring shepherd carrying a ewe or lamb. It was thus an easy transition for Roman artists to imagine Christ as the Good Shepherd of the Bible, symbolising his concern for the faithful, and it came to be the most common form of representation of Christ between the first and fifth centuries CE, speaking to the Christian community in a way that emphasised the non-hierarchical nature of the new religion (Grabar 1968: 35–6). In the fifth century CE, however, the imagery vanished almost completely in a process which saw images of the mundane and pastoral replaced by those of royalty and command (Ramsey 1983).

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
 J. Aruz, *Art of the First Cities. The Third Millennium BC from the Mediterranean to the Indus* (New York 2003).
 R. S. Bianchi, 'Two ex-votos from the Sebennytic Group', *Journal of the Society for the Study of Egyptian Antiquities* 11.1 (1981), 35–6.
 J. Black, G. Cunningham, E. Robson and G. Zólyomi, *The Literature of Ancient Sumer* (Oxford 2004).
 O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (Walnut Creek 1998).
 C. Breniquet, *Wool Economy in the Ancient Near East* (Oxford 2014).
 D. J. Brewer, D. B. Redford and S. Redford, *Domestic Plants and Animals: the Egyptian origins* (Warminster 1994).
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 W. J. Carby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London, New York and San Francisco 1977).
 J. Chadwick, J. T. Killen and J. –P. Oliver (eds), *The Knossos Tablets* (ed.⁴, Cambridge 1971).
 D. J. A. Clines, 'Psalm 23 and method: reading a David psalm', in T. Linfelt, T. Beal and C. V. Camp (eds), *The Fate of King David: the past and present of a biblical icon* (Sheffield 2010), 175–84.
 M. E. Cohen, *An English to Akkadian Companion to the Assyrian Dictionaries* (Cornell 2011).
 L. Cram and M. Fulford, 'Silchester tile making: the faunal environment', in A. McWhirr (ed.), *Roman Brick and Tile* (Oxford 1979), 201–9.
 J. M. Frayn, *Sheep-rearing and the Wool Trade in Italy during the Roman Period* (Liverpool 1984).
 I. S. Gilhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
 A. Grabar, *Christian Iconography: a study of its origins* (Princeton 1968).
 P. O. Harper, E. Brandt, J. Aruz and K. Benzel (eds), *Assyrian Origins: Discoveries at Ashur on the Tigris: antiquities in the Vorderasiatisches Museum, Berlin* (New York 1995).
 P. F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 S. Isager and J. E. Skydsgaard, *Ancient Greek Agriculture: an introduction* (London 1992).
 B. K. Ismail and J. N. Postgate, 'A Middle Assyrian flock-master's archive from Tell Ali', *Iraq* 70 (2008), 147–78.
 M. H. Jameson, 'Sacrifice and animal husbandry in classical Greece', in C. R. Whittaker (ed.), *Pastoral Economics in Classical Antiquity* (Cambridge 1988), 87–119.
 R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).

- U.S. Koch, *Babylonian Liver Omens* (Copenhagen 2000).
- M. Kozuh, *The Sacrificial Economy. Assessors, Contractors, and Thieves in the Management of Sacrificial Sheep at the Eanna Temple of Uruk (ca. 625–520 B.C.)* (Winona Lake 2014).
- S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
- A.L. Oppenheim and L. F. Hartman, 'The domestic animals of ancient Mesopotamia according to the XIIIth Tablet of the series HAR.ra = ḫubullū', *Journal of Near Eastern Studies* 4.3 (1945), 152–77.
- S. Parpola, *Assyrian Prophecies* (Helsinki 1997).
- W.M.F. Petrie, *Naukratis. Part I* (London 1886).
- A. Porter, *Mobile Pastoralism and the Formation of Near Eastern Civilizations* (Cambridge 2012).
- P. Porter, *Metaphors and Monsters: a literary-critical study of Daniel 7 and 8* (Toronto 1985).
- N. Postgate, *Early Mesopotamia: society and economy at the dawn of history* (London 1992).
- B. Ramsey, 'A note on the disappearance of the Good Shepherd from early Christian art', *Harvard Theological Review* 76 (1983), 375–8.
- S.W. Rasmussen, 'Ars haruspicina and ars nesciendi – some reflections on a sheep's liver', in K. Ascani et al. (eds), *Ancient History Matters. Studies Presented to Jens Erik Skydsgaard on his Seventieth Birthday* (Rome 2002), 165–71.
- C. Reed, 'Animal domestication in the prehistoric Near East', *Science* 130 (1959), 1629–39.
- F. Rougemont, 'The administration of Mycenaean sheep-rearing: flocks, shepherds, "collectors"', in B.S. Frizell (ed.), *Pecus: man and animal in antiquity* (Rome 2004), 24–34.
- F. Rougemont, *Contrôle économique et administration à l'époque des palais mycéniens (fin du IIe millénaire av. J-C)* (Athens 2009).
- D. Rousset, *Le territoire de Delphes et la terre d'Apollon* (Paris 2002).
- N.J. Ruane, *Gender and Sacrifice in Biblical Law* (Cambridge 2013).
- M.L. Ryder, *Sheep and Man* (London 1983).
- R. Tomes, 'I Have Written to My Lord the King': secular analogies for the Psalms (Sheffield 2005).
- N.S. Tomoum, *The Sculptors' Models of the Late and Ptolemaic Periods: a study of the type and function of a group of ancient Egyptian artefacts* (Cairo 2005).
- H.L.J. Vanstiphout, 'Lore, learning and levity in the Sumerian Disputations: a matter of form, or substance?' in G. Reinink and H.L.J. Vanstiphout (eds), *Dispute Poems and Dialogues in the Ancient and Medieval Near East* (Leuven 1991), 23–46.
- G.J. Wenham, *Genesis 16–50* (Nashville 1994).
- K.D. White, *Agricultural Implements of the Roman World* (Cambridge 1967).
- H. Wild, *Le Tombeau de Ti* (Cairo 1953).
- F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

PIG

Wild pigs are native to Europe, Asia and North Africa, and were one of the earliest animals to be domesticated, together with the sheep and the goat (Zeuner 1963: 256–71; Mizelle 2011). Genetic evidence indicates that the domestication of the pig took place at many different sites, rather than once only as in the case of other animals (MacKinnon 2001). No other animal is the focus of such divergent cultural attitudes: for the Egyptians and some peoples of Mesopotamia pigs were an important part of the diet and, to some extent, cult activity; other Eastern peoples, notably the Hebrews, regarded the pig with loathing, and swine were notoriously taboo in Jewish life. For the Greeks and Romans, again, the pig was at the centre of agricultural and religious practices. Varro (*De re rust.* II.4.3) asks, 'Who of our people cultivates a farm without keeping pigs?', and King (1999) demonstrates that a diet rich in pork was distinctive of Imperial-period Rome.

The pig was the most important source of meat in Egyptian, Mesopotamian and classical societies (and valued as much for its fat as its flesh), because it was prolific, easy to feed – being omnivorous, pigs can forage for themselves or be fed on waste of various kinds – and could be kept in small spaces. So significant was the pig as food, consumer of waste and sacrificial animal

that as classical cultures spread into Eastern regions pigs came with them. According to Pliny (*NH* VIII.209) no other animal is so versatile in cooking: the pig has fifty flavours where other animals have one, and many parts of the pig were particular delicacies at Rome including udders, paunch and wombs.

Collins (2006: 160) notes the contrast between the plentiful archaeological evidence for pigs in Mesopotamia and Egypt, and the relative scarcity of references to them in art and literature, and the same is generally true across all ancient cultures: where pigs are mentioned the description or metaphor is usually unflattering. Pigs are frequently attested in Near Eastern proverbs and in a few examples of Egyptian Wisdom Literature (see Lichtheim 1976 for a New Kingdom text in which the potter is likened to a pig: 'He grubs in the mud more than a pig in order to fire his pots'). The pig did provide one of the omens of the foundation of Rome, Aeneas being granted by Tiber the sign of the white sow with thirty piglets, marking the site of Alba Longa (Virgil *Aen.* VIII.42–8), a subject very popular in Roman art (Toynbee 2013: 131), but despite this mythic connection the pig as a mundane animal did not inspire very much affection. With the exception of Gryllos in Plutarch's dialogue of the same name (PIG no. 10) pigs were generally characterised as coarse and dirty creatures, and depictions in art concentrate on either mythologised boar hunts or scenes of sacrifice, with a few culinary still lifes (King 2001: 443–5).

Extensive populations of wild pigs also persisted in antiquity, and the wild boar was admired for its cunning and ferocity: Homer *Il.* XVII.20–2 compares its spirit to that of the lion and leopard, and it was used as both a shield device and, perhaps incongruously, the figurehead of warships: the Samians are said by Plutarch (*Per.* 26) to have sailed 'boar-prowed' ships. Because wild boar are aggressive when threatened and capable of inflicting serious injuries with their tusks, they were considered prestigious hunting quarry at all periods; in classical Macedonia it was a rite of passage for aristocratic men to kill a wild boar single-handed and without nets (Athen. 18a; see HUNTING).

1. Pig proverbs

a) Sumerian, Babylonian and Assyrian proverbs (after Alster 1997; Foster 2005; Kramer 1956; Lambert 1957)

After a lion had caught
A bush-pig, he roared,
'Until now your flesh has not
Filled my mouth, but your
Squeals have made me deaf!'

You keep walking around the storehouse like
a pig that has a morsel in its mouth.

The fatted pig is about to be slaughtered and so he says, 'It was the food which I ate!'

He was at the end of his means, so he slaughtered his pig.

The pork butcher slaughters the pig, saying: 'Must you squeal? This is the road which your father and grandfather travelled, and now you are going on it too! So why are you squealing?'

In your heart lies a dog, lurks a pig!

The pig is unholy [. . .] bespattering his rump,
Making the streets stink, polluting the houses.

b) Hebrew bible, Proverbs 11.22

Like a gold ring in the snout of a pig is a beautiful woman bereft of sense.

c) New Testament, 2 Peter 2.22

A dog returns to its vomit . . . A sow that is washed returns to her wallowing in the mud.

d) New Testament, Matthew 7.6

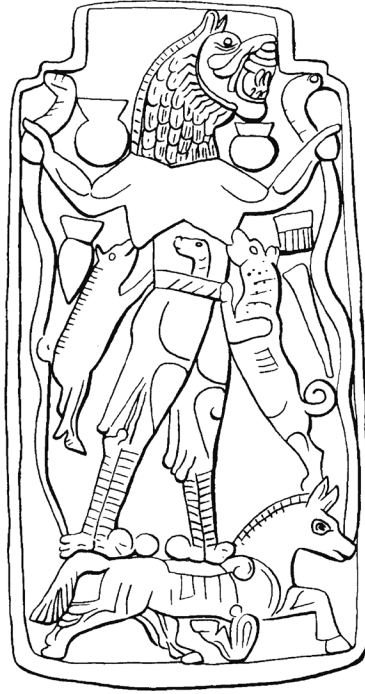
Do not give dogs what is sacred; do not throw your pearls to pigs. If you do, they may trample them under their feet, and turn and tear you to pieces.

COMMENT: Diverse attitudes towards the pig existed across the ancient Near East. Famously despised and rejected by the ancient Israelites, for the Mesopotamians the pig was an important part of the food chain and no prohibitions existed against eating its flesh. In fact, in the Mesopotamian proverbs the pig is most usually mentioned being slaughtered for its meat. After all, pigs were easy to keep, quick to grow and breed, and easy to slaughter. Having no other value besides providing meat and fat, pigs were the most readily available animals for consumption, providing almost twice as much calorie-rich meat as a sheep or a goat (Ikram 1995: 32; Miller 1990). Nevertheless, the proverbs tend to focus on the pig's more offensive habits: wallowing in mud or its own excrement (which it will also eat), its smell and its high-pitched squeals. Certain aversion to swine might also have arisen with the human realisation that pigs can transmit diseases such as trichinosis, which causes diarrhoea, pain, swelling and stiffness, as well as the belief that ingesting an animal's meat could make the human eater prone to sharing the peculiar characteristics of that beast.

Biblical references to pigs are unforgiving. Without exception, of the six mentions of the pig (Hebrew, *chazir*) in the Hebrew Bible and the fourteen in the New Testament, all speak of the animal with revulsion or derision (Bright 2006: 133–7). The image of a pig with a ring in its snout (Proverbs 11.22) is a particularly memorable and humorous one, playing as it does on the contrast between the elegant woman and the scavenging rubbish-eater. Hebrew dietary laws completely forbade the eating of pork (Leviticus 11.7; Deuteronomy 14.6) and the prophet Isaiah (65.4, 66.17) railed at those who 'eat the flesh of swine, with broth of unclean things in their bowls . . . who eat the flesh of pigs, rats and other unclean things', suggesting that the prohibition on pork was not always upheld. Isaiah also cites the breaking of a dog's neck and the offering of pig's blood as symbols of detested pagan practices (Isaiah 16.3). Devout Jews considered pigs to be the filthiest of the filthy and the deep-set detestation of swine was a defining factor of Jewish identity (2 Maccabees 6.18–19). Not only were pigs considered ritually unclean, but also dangerous, especially the wild boars which were abundant in marshes and forests – as the Psalmist confirms, 'Boars (come) from the forest (and) ravage' (Psalms 80.13).

2. Pig and dog

Neo-Assyrian amulet, c. 800–650 BCE, possibly from Carchemish (London, British Museum 117759)



COMMENT: This amulet (with an incomplete cuneiform inscription) represents the lion-headed demon Lamashtu standing on the back of a galloping wild ass or onager while suckling a dog and a wild pig with her breasts (Burkert 1992: 84; Wengrow 2014: 101–2). It was believed that these animals were the most susceptible to demonic possession and that demons could easily manifest themselves within them (see Keel 1978: 80, fig. 91 and 82 fig. 94; Mark 5.13). Throughout the ancient Near East the link between dogs and pigs, witnessed here, is evident. Both animals originated in the wild but gradually invaded the domestic sphere, although the pig and the dog were thought to have retained their essentially savage characters and even domesticated pigs and dogs were feared for their tendency to revert to their original wild behaviour; both were regarded as scavengers capable of eating anything including, if the opportunity should arise, human flesh, a theme frequently articulated in Assyrian royal inscriptions. In the *Annals of Ashurbanipal* (4.65), the king notes,

I fed (enemy) corpses, cut into small pieces, to dogs, pigs, *zthu*-birds, vultures, the birds of the sky and (also) to the fish of the ocean . . . the corpses . . . whose leftovers the dogs and pigs had fed on, were obstructing the streets, filling the places (of Babylon, and) of those who had lost their lives through the terrible famine.

Likewise in a vassal-treaty of Esarhaddon (56), the king curses his enemies: ‘May the bellies of dogs and pigs be your burial place . . . let tar and pitch be your food, donkey urine your drink.’ Interestingly, in the Greek Septuagint pigs are added to the story of the death of Jezebel, so that

together dogs and swine lick the blood and digest the corpse of the hated queen (LXX 1 Kings 20.19 and 22.38; see also DOG no. 7).

Pigs and dogs were regarded as unclean harbingers of disease and Hittite instructions for temple personnel fixate on this particular horror. An especial concern was for the presence of dogs and pigs within temple kitchens:

neither pig nor dog may come through the doors into the place where the bread is broken . . . Neither pig nor dog is ever to cross the threshold . . . If a pig or dog does somehow force its way to the utensils . . . and the kitchen worker does not throw it out . . . to that one will the gods give excrement and urine to eat and drink.

(KUB 13.4; McMahon 1997: 220)

By and large, pigs occupied a low place in Hittite society, primarily regarded as scavenging urban-dwellers who lived alongside humans in villages and towns and often caused trouble. A series of Hittite oracular enquiries provides vivid evidence for swine invading religious sanctuaries and temples in search of food (Collins 2006).

3. Pigs in Hittite ritual and law

a) Hittite 'Ritual for the Elimination of Family Discord' (Pritchard 1969: 351)

The Old Woman takes a small pig, she presents it to them and speaks as follows: 'See! It has been fattened with grass (and) grain. Just as this one shall not see the sky and shall not see the (other) small pigs again, even so let the evil curses not see these sacrificers either!' She waves the small pig over them, and then they kill it. They dig a hole in the ground and put it down into it. They put a sacrificial loaf down with it, she also pours out a libation of wine and they level the ground.

b) Hittite ritual to counteract a lunar omen affecting a baby (after Collins 2006: 165)

[I]f the moon gives an omen and in giving the omen it strikes [a per]son, then I do as follows: I dig the earth. Into the hole I take . . . a pig (and) the dung of a h[or]se (?) (and) [after]ward, I stick a piglet (into it). If it is a girl child, I take a she-piglet. If it is a boy child I take a he-piglet, and I drive in (nails) over (it). We will take seven nails of iron, seven nails of bronze, seven nails of copper (and) stone to the gate. We bow at the door of the inner chamber. If at any time it (i.e., the door) opens, we will take that stone and we will nail (it in) place. 'A pin of copper [. . .]. We draw it up and drive in (nails) over (it). They cook the piglet. Then they bring it back. I take a little bit (from) every body part and I present (them) to the Sun-goddess of the Earth. Then I say [an incantation]. . . I break a thick loaf. I take the piglet and carry it into the inner chamber. The female attendants eat it. The bones, however, they bring to the kitchen and I sell them.

c) Hittite Laws §81_6, 191 c. 1650–1500 BCE (Hoffner 1997)

If anyone steals a fattened pig, they used to pay 40 shekels of silver. But now he shall pay 12 shekels of silver. He shall look to his house for it. If anyone steals a pig of the courtyard, he shall pay 6 shekels of silver. He shall look to his house for it.

If anyone steals a pregnant sow, he shall pay 6 shekels of silver, and they shall count the piglets: for each 2 piglets he shall give 50 litres of barley. He shall look to his house for it. If anyone strikes a pregnant sow a lethal blow, its (i.e., the case's) settlement disposition is exactly the same. If anyone cuts out a piglet and steals it, he shall give 100 litres of barley.

If a pig enters a grain-heap, a field or a garden, and the owner of the grain-heap, field (or) garden strikes it a lethal blow, he shall give it back to its owner. If he doesn't give (it back), he shall be considered a thief. . .

If a dog devours pig's lard and the owner of the lard finds him out, he may kill it and recover the lard from its stomach. There will be no compensation.

COMMENT: Alongside puppies, piglets held an important position in the hierarchy of ritual animals in Hittite religious texts. The ritual slaughter of pigs occurred often and the ingestion of pork was therefore common in Hittite society, although it should be noted that when pigs were killed or eaten in ritualised contexts, the purpose was not to feed the gods but served some other function, such as purification or, in the cases represented here, as a surrogate. Dangling a piglet over a patient while intoning the correct incantations, or cutting a piglet in half or burying it in the ground were seen as effective methods of removing miasma or cleansing an individual of spirit-possession. The 'Elimination of Family Discord' recorded here is thus composed of two ritualised actions: the elimination of the evil in which the bad spirit was transferred into the piglet followed by its burial and supposed return to the underworld whence all evil came. As unclean animals, piglets were considered to be excellent conduits for purification and were particularly effective in the cleansing process when combined with a puppy; both young animals were offered to chthonic deities as sacrifices (Collins 2002: 323).

Nonetheless, pigs could project a more positive message and their fecundity was valued and admired. One Hittite birth-ritual encouraged an expectant mother to 'give [bi]rth often like the pig' and required her to stand over a sow while she recited the story of mankind's creation (Collins 2002: 323). The fertile pig was also evoked in prayers and incantations for healthy harvests: 'Just as a single pig gives birth to many piglets, let every single branch of this vineyard, like the pig, bear many grape clusters!' (Collins 2006: 162).

The Hittite Laws show the pig in a different light and indicate that pigs could make a nuisance of themselves not only in temples and sanctuaries but by trampling gardens and fields or destroying a grain-supply. Pigs running wild in the streets of town and cities could cause havoc, as witnessed in Hittite Law §86. The Laws reveal that pigs were cheap and easy to keep since they would eat whatever was available and while some swine might have been raised on a diet of good grain, this was the exception and not the norm. Unsurprisingly the Hittite Laws set a hefty replacement value on a grain-fed ('fatted') adult pig – 12 shekels – thereby making the animal more valuable than a sheep (although less so than a cow). The 'pigs of the courtyard' (those not grain-fed but allowed to eat anything including household waste and scraps) were half the price of a hand-reared pig. The Laws also emphasise the importance of pigs' highly valuable fat, which could be used for the creation of perfumes and medicines.

4. A Greek view of Egypt's pigs

Herodotus Histories II.47.1–2

The Egyptians hold the pig to be unclean, and if anyone accidentally touches a pig he immediately goes to the river to wash himself, clothes and all. The swineherds, although they are trueborn Egyptians, are the only people in the country who cannot enter a

temple, nor is anyone willing to give his daughter in marriage to a swineherd, or to marry one of their daughters; instead the swineherds intermarry among themselves. The Egyptians do not think it appropriate to sacrifice a pig to any god except for the Moon and Dionysus (i.e. Osiris); they make this sacrifice to the deities together at the full moon and eat the meat. There is a legend which the Egyptians tell among themselves which explains why pigs are sacrificed only at this festival and no other, but I do not consider it appropriate for me to relate.

COMMENT: Egyptologists, reliant on the Greek historian's view of pigs, have often maintained that there were dietary taboos against pork, similar to those encountered in the Hebrew Bible (see Leviticus 11. 7–8; Deuteronomy 14.8; Dawson 1928). However, Herodotus' account of the Egyptian aversion to pigs is open to considerable scholarly debate as the picture he draws of the revulsion shared by all Egyptians towards the animal does not sit well with earlier pharaonic evidence (Lloyd 1976: 216–18; Darby, Ghalioungui and Grivetti 1977: (I) 171–209; Ikram 1994: 29–30; Asheri, Lloyd and Corcella 2007: 271–2). Pig farming was, in fact, practised very early on in Egypt, and Herodotus' description of the social ostracism of swineherds is feasible in an ancient Near Eastern context: swineherds across the Near East would lead urban pigs out each day to forests and fields so they might forage around and at night would bring them back to town. Urban peoples may have therefore regarded swineherds as coarse rustic types, too closely associated with dirt for comfort. Shepherd certainly suffered from this stigma (Genesis 46.34). Nevertheless, royal swineherds and indeed officials in charge of temple pigs are attested in the reign of Senwasret I of the Middle Kingdom and in the Nauri Decree (the temple accounts of Seti I) of the XIX Dynasty (Griffith 1927; Ikram 1994: 29). In the few painted depictions that survive, pigs are always represented in a positive manner, participating in useful daily farm activities such as trampling seed into the soil. It is possible that pigs were considered taboo only in certain situations, such as in funerary rituals; likewise 'unclean' swine might have been forbidden to priests, or to some (or all) persons at particular times in the year, but not on other occasions.

Perhaps a change in the depiction of the god Seth had set in by the Late Period wherein the god was progressively portrayed in a negative light; as an animal traditionally associated with this god (below), the pig was increasingly seen in a negative light and by the Greek period the image had become fixed. Moreover, Herodotus' understanding of the pig must have informed his reading of the Egyptian interaction with the animal. Pigs were amongst the most commonly sacrificed animals in the Greek world (below no. 8), ranking next to goats, sheep and bulls, and hence it is possible that Herodotus overplays the Egyptian aversion to the pig to play up the topsy-turvy nature of Egypt when compared to Greece, an overarching concern in his ideological construction of the world.

5. Seth's black pig

Egyptian Book of the Dead (112)

Formula for knowing the powers of Khemenu

Lake-dwellers who are in the lakes, Mendesians of the Mendes nome

Weavers who are in Pe, shaded women without access

brewers of beer, mashers of bread

Do you know why Pe was given to Horus?

I know, if you do not know

It is Re that gave it to him for the damage in his eye

From what Re said to Horus, 'let me see what is in your eye' as he saw it

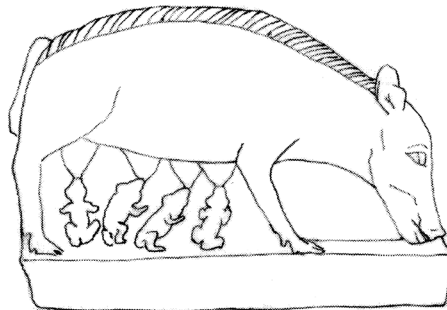
Then Re said to Horus, look up at that black boar
And he looked and very fierce pain hit his eye
And Horus said to Re, 'See, my eye is as at that strike by Seth',
And he lost consciousness
Then Re said to those gods placing him on the bed to be better
'It is Seth – he took the form of a black pig,
and burned the blow of his arm which is in the eye of Horus.'
And Re said to those gods 'Abominated the black pig for Horus, and he will be well
The abomination arose of the black pig for Horus by the gods in his following
after that Horus had been a child and his offerings had been of his herds, flocks, swine
As for Imsety, Hapy, Duamutef, Qebehsenuef, their father is Horus, their mother Isis.'
And Horus said to Re, 'Place two brothers in Pe, two brothers in Nekhen
from this my troupe, and to be with me assigned for eternity
The land may flourish, the turmoil be quenched.'
It happened for Horus who is upon his papyrus-column
I know the powers of Pe; it is Horus, it is Imsety, it is Hapy

COMMENT: This is the only instance of the pig (Egyptian, *sa'aw, rery*) being openly criticised in an Egyptian source. It is, of course, a religious text, recording the cosmic battle between Horus and Seth wherein the chaotic divinity Seth takes on the form of a pig (as opposed to his 'incarnations' as a donkey, hippopotamus, goat, crocodile or even certain types of fish (Wilkinson 2003: 199)). The destruction (by sacrifice or otherwise) of Sethian animals was therefore part of the cultic activity surrounding the god (Newberry 1928). At the temple of Edfu, for instance, Seth is shown as a hippopotamus and, in a later Greco-Roman development, as a pig; he is speared and killed by the victorious hunter, Horus. Ikram (1995: 32) sees the reference to the pig in the *Book of the Dead* as an affirmation of its importance to the Egyptians: 'One could argue that if the pig symbolises Seth, then the slaughter and consumption of "Seth" would be a positive rather than a negative act.'

In spite of this connection to Seth, pigs could still be offered to the gods. As early as the III Dynasty pigs were associated with funerary feasts and by the New Kingdom swine were certainly being sacrificed at state temples: the Medinet Habu accounts of Ramses III reveal that swine were killed for the god Nefertum at one of his holiday feasts, while Amenhotep III is recorded offering 1,000 pigs and 1,000 piglets to the temple of Ptah at Memphis (Ikram 1994: 29).

6. A sow suckles her piglets

***Egyptian blue glazed figurine, Late New Kingdom or Late Period
(London, British Museum E11976)***



COMMENT: A significant number of figurines of pigs and sows exists, in comparison to the very few Dynastic-period tomb paintings depicting swine (just nine in total, including images of boars and warthogs: see Brewer, Redford and Redford 1994: 93–7; Houlihan 1996: 26–7; Osborn and Osbornova 1998: 142–4). Paintings and sculptures show them to be long-legged, scrawny and long-snouted creatures with short bristly hair and a ridge along the spine, far removed from the fat, pink farm animals familiar to modern Westerners (Germond 2001: 62–3). Despite Herodotus' insistence that pigs were taboo in Egyptian society (above), there is overwhelming archaeological evidence to prove that pork was readily available and regularly eaten by the Egyptians (Ikram 1995; Brewer, Redford and Redford 1994: 93–7). Pigs were economical to keep and, as with dogs, their scavenging performed an essential sanitation service for humans. It was not uncommon in many parts of the ancient world for a household to raise a pig or two at home on household refuse. In fact, the bond that can develop between human and pig in this situation can be very close (Hurn 2012).

The Egyptians willingly embraced a positive image of the pig, especially, as in this faience statuette, in the images they created of the fertile, nurturing sow. The inscription at the base of the figurine names the goddess Nut, the great sky mother-goddess, and links the nursing mother and her piglets to the Heavenly Sow, a popular fertility symbol. Depictions of Nut were often painted underneath the lids of coffins and she was sometimes represented there as the divine sow, the eternal mother of the night stars, who were identified as her piglets.

7. Eumaeus and his pigs

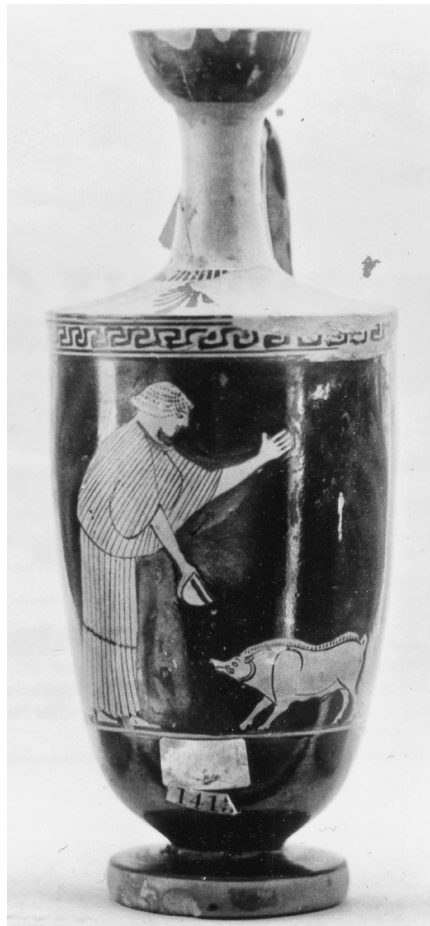
Homer Odyssey XIV.5–28

[Odysseus] found the swineherd sitting before his stading,
Where he had a high courtyard with a view all round,
High and fine with a circuit-wall. This the swineherd
Had built himself for the pigs in his master's absence,
Without the aid of his mistress or old Laertes;
He built it from quarried stones, with a fence of prickly wild pear at the top.
Outside, cleaving a dark oak for its wood, he made
A palisade of stakes crowded close together.
Inside the court he made twelve sties in a row,
Sleeping-places for the sows, and in each one
Fifty pigs were penned, sleeping on the ground,
Breeding sows. The boars spent the nights outside,
Much reduced in number. For the princely suitors diminished
Their numbers by eating them: the swineherd sent them
Every day the best of the fatted hogs.
So the boars were three hundred and sixty in number.
Beside them four dogs as fierce as beasts always lay,
Dogs which the master swineherd cared for.
He was making sandals for his feet, cutting a well-coloured ox-hide.
Of the other herdsmen, three had gone out with the pigs to pasture,
One here and one there; the fourth Eumaeus had sent perforce to the town
To take a pig to the overbearing suitors, so that they might
Slaughter it and have their fill of the meat.

COMMENT: Odysseus' swineherd Eumaeus is undoubtedly the most famous pig-herder in classical literature: Odysseus encounters him first of all his servants on returning to Ithaca, and Eumaeus treats his disguised master with the respect and generosity so lacking in the aristocratic suitors. Pigherding was low in status compared to the shepherds and goatherds of bucolic poetry, though Homer gives Eumaeus a suitably aristocratic past before his sale into servitude (Loudon 1997). Odysseus' herds of pigs are obviously intended to be most impressive in numbers – 600 breeding sows and 360 boars – supplying a ready flow of meat for the table: the pigs are fattened and slaughtered as adults for communal banqueting. Wild boar are also very significant in Homer as high-status hunting quarry: the scar which reveals Odysseus' identity was sustained from the tusk of a boar during a hunt (*Od.* XIX.439–51; see below no. 12) – and while cattle and horses play a larger role as prestige domestic animals, Eumaeus' pigs receive the greatest attention because they are so much part of the *oikos*, unlike grazing animals.

8. The household pig

*Attic red-figure lekythos, Naples Archaeological Museum
H3353, from Italy, c. 460 BCE*



COMMENT: While a wealthy man like Odysseus is credited with a herd of hundreds of pigs, in archaic and classical Greece farming was on a much smaller scale, and pigs especially lent themselves to keeping in town as well as country. The lekythos above is one of a small number which carry scenes of animal husbandry, and most often, as in this case, it is women who are shown feeding domestic animals. Because they were ubiquitous, few Greek sources discuss pigs extensively, but comic drama shows us in a series of passing references the role of the household pig. Aristophanes' *Wasps* (843–5) and *Lysistrata* (1072–3) refer to wicker pigpens which were used to keep pigs in the courtyards of houses, and a poem in the *Greek Anthology* (VI.306) may refer to the cook's key to such an enclosure. Pigs are exceptionally useful in this way, because they are omnivorous and can thrive in small spaces: a comment in *Peace* (24–5) indicates that as well as consuming household scraps, human waste might also form part of their diet. Aristotle (*HA* 603b 27–9) comments that while suitable foods for fattening pigs are chickpeas and figs, they do best on a varied diet. While meat formed only a small proportion of the ancient Greek diet, pork appears to have been the most commonly eaten, as both cheap to produce and easily preserved, and comedy makes frequent reference to sausages and rissoles as everyday foods (Frost 2001: 246–9). Calder (2011: 75–6) collects some interesting sources on domestic pigs' potential for destructiveness towards both household and crops, if allowed to wander. So much part of the household was the pig that it is even common as a child's toy: terracotta pigs with pebbles inside have been found at sites across Greece as rattles for young children (Neils and Oakley 2003: 176–7).

9. The pig as sacrifice

Moulded terracotta votive pig figurine, Amsterdam, Allard Pierson Museum inv. no. 8736, from Rhodes (?), c. fifth century BCE, l. 9.5 cm
(Photograph courtesy of the Allard Pierson Museum; photograph by Stephan van der Linden)



COMMENT: Votive offerings in the form of pigs are very common in the Greek world: this example comes from the East Greek islands. Pigs, both adults and piglets, were one of the most popular sacrificial animals, particularly for private worship, because they are quick to reproduce and therefore cheaper than cattle or sheep; they were especially preferred for sacrifices involving purification, and at Rome for ceremonies of oath-taking, because in rituals of this kind there was no element of communal feasting – the piglet, as Calder (2011: 76) notes, offered a cheap and readily available individual sacrifice. Those being initiated into the Great Mysteries at Eleusis, for instance, were required to ritually purify themselves and a sacrificial piglet in the sea, before making an offering of it (Ar. *Ach.* 747; Plut. *Phok.* 28.6; see SHARK no. 1), and depictions of private sacrifice on Greek vases frequently show the worshipper with a piglet (Van Straten 1995: ch. 5.7). Votive pigs were also regularly dedicated to Demeter: large numbers of terracottas of pigs, or of women carrying piglets, are found at her sanctuaries, while at Eleusis a dedication was found of a large marble pig (now in the collection of Harvard University Library). In the temple of Demeter and the ancestor gods at Thasos (Rolley 1965) a particular form is found, representing a pregnant sow with her unborn piglets visible inside her. The sacrifice of pregnant animals to Demeter was a common practice, related to her role in ensuring the fertility of both women and land, and the pig, as a prolific breeding animal, was her preferred sacrifice (Cole 1994: 203–4).

10. Pig husbandry

Columella De agricultura VII.9 (extracts)

In all kinds of quadruped species the males should be chosen with care for their appearance, since the offspring are more often similar to the father than to the mother. For this reason, in choosing pigs one should prefer boars which are very large in the body, though stocky rather than long or round, with a low-hanging belly, big hams, though legs and hooves not proportionally as long, a broad and swelling neck and a short upturned snout. The most important thing is that they should be lusty for breeding. They are fit for breeding at a year old, until they are four, although they can breed at six months. Sows should be very long in the body, and otherwise as described above. If the district is cold and prone to frost, a breed with tough and thick black bristles should be preferred; if it is mild and sunny, a smooth breed may be raised, or even white pigs such as are kept by bakers. Sows can breed for seven years, although the more prolific they are, the more quickly they age. A sow can conceive in the first year, and they should be covered by the boar in the month of February, so that they gestate for four months and farrow in the fifth, when the grass is well grown; then the piglets will grow with a steady supply of milk, and when they are weaned they can feed on stubble and beans. This is done in provincial regions, where only stock-raising is profitable; in regions closer to the city the piglets should be sold as sucking pigs: in this way the sow does not have the trouble of raising them and can be bred again as quickly as possible. The males are castrated so that they can be fattened, either at six months, when they are mature, or at three or four years if they have been used for breeding. . . .

Pigs can be raised in practically all kinds of country, for they pasture easily in both mountainous country and plains, although better in well-watered fields rather than dry. Woods are the most suitable pasture . . . but when there are few trees we should feed them on ground crops and prefer muddy ground to dry, so that they can root around in the marsh and dig up earthworms, and wallow in the mud, which pigs particularly

enjoy. And let them also have access to water, which is especially good for them in summertime. [There follows a discussion of the feeding of pigs.]

Pigs should not be penned in all together, as other flocks are, but should have sties made for them in rows, in which the pregnant and farrowing sows can be confined. For it is characteristic of pigs that when they are penned up in a disorganised crowd, they lie one on top of the other and cause miscarriages. For this reason, as I said, sties should be constructed with adjoining walls, four feet in height, so that the sows do not try to climb over them. They should not be roofed, so that the swineherd can look over and count the piglets, and if the mother is lying on any of them, he can pull it out from under her. The swineherd should be vigilant, energetic, hardworking and diligent. He should know all the herd, the breeding sows and the younger ones, so that he can recognise to which each farrow belongs. He must always watch for a sow which is about to give birth, and close her up in her sty to farrow; and then he should note immediately how many piglets there are and in what condition, and take great care that only the mother nurses her young, because pigs mix themselves up very easily, if they are not in the sty, and a sow lying down will offer her teats to her own and others' offspring indiscriminately. Thus it is one of the swineherd's most important tasks to pen each sow in with her litter. If he has difficulty in remembering and cannot recognise each litter, he should mark each sow and her piglets with liquid pitch, distinguishing each mother and piglet by letters or other marks. When there are large numbers of pigs he should use various marks so that his memory does not become confused. But since it is difficult to do this for very large herds, in this case it is more convenient to construct the sties so that the threshold of each is low enough for the sow to get out, but too high for the piglets; in this way no other piglet can get in, and each litter waits for their mother in the sty. Litters should not exceed eight in number; I know that sows are very fertile and can produce many more, but those sows which raise a greater number are very soon exhausted. Those which are rearing their young should be fed on cooked barley, lest they become too thin and contract disease. The careful swineherd will frequently sweep out the pig-yard and the sties, because although pigs when eating will scatter their food indiscriminately, they prefer their sleeping-places to be very clean.

COMMENT: Columella's account of pig-keeping, aimed at those with significant numbers of animals rather than the peasant farmer with a few pigs, offers a great deal of incidental information about Roman pigs. He indicates the existence of two breeds of domestic pig, smooth and bristly, which have been traced in the archaeological and sculptural record by MacKinnon (2001: 661–5); the smooth breed was larger, but it does not seem to have displaced the hardier bristly breed, which was more suited to woodland foraging. The reference to 'white pigs such as are kept by bakers' is explained by a reference in Plautus (*Captivi* 4.2.28) which says that bakers keep pigs and feed them on bran left over from their baking. Columella also believes that the greatest profit is to be made from the sale of suckling pigs, where the farm is close enough to the city for the trade to be viable: this suggests that young pigs were the preferred form of pork, and that farther-flung areas would compete by producing preserved pork instead. Varro speaks admiringly of Gallic hams and tells tall tales of the huge pigs farmed in Lusitania in Spain (*De re rust.* II.4.10–12).

The system of sties described here has been substantiated by excavation of the villa at Settefinestre, which discovered a complex of twenty-seven sties of precisely this type, constructed in the first century CE (Carandini and Ricci 1985). While Columella seems to expect his pigs to be raised largely indoors, Varro (II.4.20) describes the training of pigs to obey the sound of a horn, so that they can be taken out to feed in the woods and then summoned by the horn to

come home, and Polybius (XII.4) writes with admiration of the way that Italian pigs will gather to their swineherd's individual horn call, saying that in Greece when herds of pigs become mixed together in the woods the swineherds will take advantage of this and try to drive away their neighbours' pigs with their own.

11. The soul of the pig

Cicero On the Nature of the Gods II.160

And what role has the pig, apart from being eaten: as Chrysippus said, its soul was given to it as salt, so to speak, to keep its flesh from going bad. Because it is most suited for human consumption, nature made no other creature more prolific.

COMMENT: Cicero here repeats a well-known joke of the Stoic philosophers, that the purpose of the pig's soul is simply to preserve its meat as fresh until the moment that humans want to eat it; the comment is repeated by Varro, Pliny and Plutarch, and is also said of fish (Pease 1958: 960). It is indicative of the Stoic view of animals, namely that they were inferior to humans, created for human use and that therefore it was right to exploit them without concern for their feelings or welfare; the joke also shows, however, that a question might legitimately be asked about why animals seemed to demonstrate purpose and rationality if their only function was to provide humans with food. While the Stoic view was the prevailing opinion among philosophers, especially at Rome, there were dissenting voices. Plutarch puts the pig at the centre of the debate in his dialogue *Gryllos* (*Mor.* 985d–992e), which takes the form of a discussion between Odysseus and Gryllos (the name means 'Oinker'), one of Odysseus' former crewmembers who was transformed into a pig by Circe. In the dialogue Odysseus offers to return Gryllus to human form, but Gryllos states that he has no desire to be changed back, finding life as a pig far preferable, and goes on to outline the ways in which animals are superior to men: in courage, in self-control, in moral behaviour and in devotion to their offspring. The pig seems to have presented ancient philosophers with particular difficulties: because it was a close companion of humans its habits could be observed, and while it was on the one hand brutish and dirty, it was also evidently capable of learning and acting rationally (Pliny *NH* VIII.208 gives examples of pigs' intelligence), and hence it could function both as a demonstration of human superiority and as an example of the nobility of the animal soul.

12. The Roman pork dole

Theodosian Code 14.4.4

Emperor Constantine Augustus to Lucius Verinus [Prefect of Rome]

The landowner shall have the right to decide whether to pay the swine-collector in money, which is permitted so that the swine-collectors should not have freedom in estimating the weight of the pigs. If the swine-collector produces a correct estimate of the pigs, the landowner may pay him money, since he has the right to pay in either pigs or money. In order that the swine-collectors may not suffer any loss by accepting monetary payment, in each year the landowner shall pay the price for pork which has been established by public trade. And because prices are variable and differ from place to place, the appropriate price shall be paid according to time and place, unless payment is made in pigs. The regional judges should see to it that each year they report to Your

Wisdom the prices for pork in their district, so that when the information has been considered by Your Gravity, the swine-collectors can go out to their various districts and accept the prices which you will have learnt to be current in each district. The swine-collectors will not be able to complain, because it makes no difference to them whether they get the pigs at a higher price or a lower one, because they will be given the same price which they received from the landowner; and the landowners will be restrained in selling their goods, since they will realise that however great a price they ask for their pork, they will have to pay the swine-collectors a similar amount.

Given on the third day before the Ides of April in the seventh consulship of Constantine Augustus and the consulship of Constantius Caesar.

COMMENT: This law of 326 CE is one of a series of regulations concerning the collecting of pigs to furnish the dole of pork given to Roman citizens in the late Empire: a guild of swine-collectors existed, whose job it was to collect pigs from the provinces and supply them to the authorities at Rome. The dole was not particularly high – five pounds of pork per month for a household, for five months – but as it was given to 120,000 households (the figure for 419 CE) it required the supply of very high numbers of pigs and reflects the role of pork as a staple in the Roman diet (Barnish 1987: 163–4). Pigs were raised in the provinces – Campania, Lucania and Bruttium are mentioned – and a certain number were required from each landowner as a tax. The regulations above stipulate that landowners may pay their tax either in pigs or in money, the latter being much preferred by the swine-collectors since transporting the pigs to Rome resulted in heavy losses. But evidently the swine-collectors engaged in sharp practice, deliberately underestimating the weight of the pigs in order to force the landowners to hand over more of them. The current regulation does not seem to have solved the problem, as a law subsequently passed in the reign of Valentinian and Valens declares that swine-collectors' estimates of the pigs' weight are unacceptable, and that all pigs must be accurately weighed (14.4.4). This later edict, however, reveals the landowners' equally sharp countermeasures: once the pigs have been weighed, they must be properly fed until the day before they are handed over, meaning that they cannot be bloated up for the weighing and subsequently starved.

13. A piglet's will

Testamentum Porcelli

Butcher the cook said, 'Come here, destroyer of the house, burrower, runaway piglet, and today I will end your life.' Corocotta the piglet said, 'If I have done anything wrong, if I have committed any fault, if I have broken any little vase with my hooves, I beg you, master cook, spare my life.' Butcher the cook said, 'Boy, come here and bring me my knife from the kitchen so that I can kill this piglet.' The piglet was seized by the servants and brought in on the sixteenth day before the calends of the month of the lamps, in the sprouting-cabbage season, in the consulship of Baked and Peppered. When he saw that he was about to die, he asked the cook for one hour in which to make his will. He summoned his relations, so that he could distribute his possessions to them. Here is what he said.

[Here begins the will of the piglet. M. Grunnius Corocotta, piglet, made his last will and testament. Because I could not write it in my own hand, I dictated it to be written down.]

To my father Pork-Broth I give and bequeath thirty *modii* of acorns; to my mother Old Sow I give and bequeath forty *modii* of Laconian wheat; and to my sister Grunter,

at whose marriage I cannot be present, I give and bequeath thirty *modii* of barley. Of my organs I make the following bequests: my bristles to the shoemakers, my head to the quarrelsome, my ears to the deaf, my tongue to the lawyers and the verbose, my intestines to the sausage-makers, my thighs to the stuffing-makers, my loins to the women, my bladder to the boys, my tail to the girls, my muscles to the nancy-boys, my ankles to the hunters and coursers and my hooves to the thieves. And I leave my ladle and pestle, which I brought with me from Thebeste to Tergeste, to the cook who shall not be named; may he hang (with) them round his neck. And I wish that a tombstone be raised to me, inscribed as follows in letters of gold:

M GRUNNIUS
COROCOTTA
PIGLET
LIVED 999 YEARS
AND HALF A DAY
IF HE HAD LIVED HALF A DAY MORE
HE WOULD HAVE REACHED A THOUSAND YEARS

My beloved friends and companions of my life, I ask that you treat my body well, cooking it carefully with fine flavourings of almond, pepper and honey, so that my name shall go down in history. My masters and companions who have witnessed my testament, please sign.

Bacon-Fat signed. Meatball signed. Cumin-Flavoured signed. Smoked Sausage signed. Crackling signed. Gourmet signed. Wedding-Feast signed.

The piglet's will was made with good fortune on the sixteenth day before the calends of the month of the lamps in the consulship of Baked and Peppered.

COMMENT: According to the fifth-century CE writer Jerome, the will of M. Grunnius Corocotta was hugely popular among schoolboys in his time: he comments disapprovingly that pupils find it more entertaining than Cicero and spend their time chanting such comic pieces when they should be studying proper authors (*Cont. Rufinum* 1.17, *In Isaïam* 12, pref.). Who actually wrote it, and why, remains obscure: we have no evidence for the author or even the period, although its history shows that it was enormously popular in antiquity, surviving in no fewer than seven separate manuscripts (Aubert 2005: 108); it is one of the few examples of literature with mass appeal from the ancient world. Modern interpretations have focused on finding a historical context for the piece: Aubert suggests that it is an anti-Christian satire, and Champlin (1987) that it is a parody based on the case of a notorious robber named Corocotta. Searching for such meanings, however, seems unnecessary; apart from the intrinsic humour of the piece, it teaches elements of Latin counting and vocabulary, and was no doubt useful to schoolboys across the Roman empire.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
D. Asheri, A.B. Lloyd and A. Corcella, *A Commentary on Herodotus Books I–IV* (Oxford 2007).
J.-J. Aubert, “‘Du lard ou du cochon’? The *Testamentum Porcelli* as a Jewish anti-Christian pamphlet”, in J.-J. Aubert and Z. Varhelyi (eds), *A Tall Order. Writing the Social History of the Ancient World: essays in honour of William V. Harris* (Saur 2005), 107–41.
S.J.B. Barnish, ‘Pigs, plebeians and *potentes*: Rome’s economic hinterland, c. 350–600 AD’, *PBSR* 55 (1987), 137–85.

- D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals. The Egyptian Origins* (Warminster 1994).
- M. Bright, *Beasts of the Field* (London 2006).
- W. Burkert, *The Orientalizing Revolution: Near Eastern Influence on Greek culture in the early archaic age* (Cambridge 1992).
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
- A. Carandini and A. Ricci (eds), *Settefinestre: una villa schiavistica nell'Etruria romana*, vol. 1 (Modena 1985).
- E. Champlin, 'The testament of the piglet', *Phoenix* 41 (1987), 174–83.
- S.G. Cole, 'Demeter in the ancient Greek city and its countryside', in S.E. Alcock and R. Osborne (eds), *Placing the Gods: sanctuaries and sacred space in ancient Greece* (Oxford 1994), 199–216.
- B.J. Collins, 'Animals in the religions of Anatolia', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 310–34.
- B.J. Collins, 'Pigs at the gate: Hittite pig sacrifice in its eastern Mediterranean context', *Journal of Ancient Near Eastern Religions* 6.1 (2006), 155–88.
- W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London and New York 1977).
- W.R. Dawson, 'The pig in ancient Egypt: a commentary on two passages of Herodotus', *Journal of the Royal Asiatic Society of Great Britain and Ireland* 3 (1928), 597–608.
- T.L. Forti, *Animal Imagery in the Book of Proverbs* (Leiden 2008).
- B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 2005).
- F.J. Frost, 'Sausage and meat preservation in antiquity', *GRBS* 40 (2001), 241–52.
- P. Germond, *An Egyptian Bestiary* (London 2001).
- F.L. Griffith, 'The Abydos Decree of Seti I at Nauri', *Journal of Egyptian Archaeology* 13.3–4 (1927), 193–208.
- H.A. Hoffner, *The Laws of the Hittites. A Critical Edition* (Leiden 1997).
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- S. Hurn, *Humans and Other Animals: cross-cultural perspectives on human–animal interactions* (London 2012).
- S. Ikram, 'Food for eternity. What the ancient Egyptians ate and drank. Part 1: Meat, fish, fowl', *KMT. A Modern Journal of Ancient Egypt* 5.1 (1994), 24–33.
- S. Ikram, *Choice Cuts: meat production in ancient Egypt* (Leuven 1995).
- G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
- O. Keel, *The Symbolism of the Biblical World. Ancient Near Eastern Iconography and the Book of Psalms* (New York 1978).
- A. King, 'Diet in the Roman world: a regional inter-site comparison of the mammal bones', *JRA* 12 (1999), 168–202.
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
- W.G. Lambert, 'Morals in ancient Mesopotamia', *Ex Oriente Lux* 15 (1957), 184–96.
- M. Lichtheim, *Ancient Egyptian Literature. Volume II: The New Kingdom* (Berkeley 1976).
- A.B. Lloyd, *Herodotus Book II. Commentary* 1–98 (Leiden 1976).
- B. Loudon, 'Eumaïos and Alkinoos: the audience and the *Odyssey*', *Phoenix* 51 (1997), 95–114.
- M. MacKinnon, 'High on the hog: linking zooarchaeological, literary and artistic data for pig breeds in Roman Italy', *AJA* 105 (2001), 649–73.
- G. McMahon, 'Instructions to priests and temple officials' in W.W. Hallo (ed.), *The Context of Scripture. Volume I* (Leiden 1997).
- R.L. Miller, 'Hogs and hygiene', *Journal of Egyptian Archaeology* 76 (1990), 125–40.
- B. Mizelle, *Pig* (London 2011).
- J. Neils and J.H. Oakley, *Coming of Age in Ancient Greece: images of childhood from the classical past* (Yale 2003).
- P.E. Newberry, 'The pig and the cult-animal of Set', *Journal of Egyptian Archaeology*, 14.3–4 (1928), 211–25.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- A.S. Pease, *M. Tullius Cicero: De Natura Deorum* (2 vols) (Cambridge, MA 1955–8).
- J.B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament. Third Edition with Supplement* (Princeton 1969).
- C. Rolley, 'Le sanctuaire des dieux patrooi et le Thesmophorion de Thasos', *BCH* 89 (1965), 44–83.
- D.J. Thompson, 'Ptolemaic pigs: an ecological study', *Bulletin of the American Society of Papyrologists* 39 (2002), 121–38.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- E.T. van Straten, *Hiera Kala: images of animal sacrifice in archaic and classical Greece* (Leiden 1995).

- D.Wengrow, *The Origins of Monsters. Image and Cognition in the First Age of Mechanical Reproduction* (Princeton 2014).
R.H.Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003).
F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

HORSE

It is impossible to do justice to the importance and interest of the horse in antiquity in a short selection of sources. Those chosen below offer an overview of the areas in which the horse was most valued.

Horses were first introduced into the Near East only around 2000 BCE, after they had been domesticated elsewhere – possibly first on the Eurasian steppes as a hardy species known as Przewalski's horse, or perhaps in the area north of Kazakhstan, where archaeological evidence for domestication can be dated to around 3500 BCE (Zeuner 1963: 299–325; Clutton-Brock 1987: 80–90; Drews 2004; Kelekna 2009). Some of the earliest visual evidence for the introduction of the horse into Mesopotamia dates to about 1750 BCE where they were first used for pulling chariots. Provided for and patronised by royalty and the military elite, the chariot horse was to reign supreme throughout the Near East for a thousand years, utilised successively, and to great effect, by Mitannians, Hittites, Egyptians, Israelites, Assyrians, Babylonians and Persians (Cotterell 2005). Horse breeding, capture, training and care are staple subjects in ancient Near Eastern texts and the horse is a constant presence in art works, admired as much for its nobility, strength, swiftness and beauty as for its integral role in human culture and society (see Johns 2006).

A similarly vast amount of information exists about the cost, care, knowledge and treatment of horses in the classical world, and they dominate classical art as no other animal. The horse was not an animal of practical purpose for agriculture or transport, roles which were fulfilled by oxen or mules, but was a high-status animal, kept by the wealthy for show and leisure – Varro describes its main uses in first-century BCE Rome as military service, racing, driving or riding for leisure and breeding (*De re rust.* II.7.15) – and an important object of conspicuous consumption. Great interest was taken in the different breeds of horse from around the Mediterranean and further afield: the Greeks valued Thessalian and Venetic horses most highly, and the tyrant Dionysius I of Syracuse had a stud of Venetic horses in the fourth century BCE (Strabo *Geog.* V.1.4). As the Roman Empire expanded new stock was drawn in from Persia, Spain and the north; Vegetius (*Mulomedicina* 3.6) gives a long description of suitable breeds for different activities, though most highly rated at most times in Rome were the swift and light Persian and Libyan breeds (Hyland 1990: 11–29).

Because, throughout antiquity, the horse was a high-status and expensive animal, it attracted a certain amount of mythologising – most famous leaders in antiquity are said to have had an equally famous horse reflecting their own remarkable qualities, like Ramses II's war-horses Victories-in-Thebes and May-Mut-be-Satisfied (below no. 4), Alexander's Bucephalus and Caesar's polydactyl mount (Suet. *Caes.* 61). Horses were strongly individualised, and more names for horses are known from antiquity than for any other animal (Toynbee 2013: 177–83 and below, no. 21). They also abound in art of all periods, from Sumerian votive seals and plaques (Curtis and Tallis 2012: 85–7) and Egyptian jewellery (Johns 2006: 152) to early Greek votives through to the Parthenon frieze and the equestrian statues of imperial Rome. Horses experienced more care and interest than any other animal in classical societies, although this does not mean that all were treated well.

1. The supremacy of the horse

a) The Contest Between the Ox and the Horse, Babylonian wisdom text, c. 1531–1155 BCE (Lambert 1960: 177–83)

The Ox and the Horse became friends,
Their bellies were sated with the luscious pasture,
In their pleasure they engaged in a dispute.
The Ox opened his mouth and spoke, addressing the Horse, glorious in battle,
'As I look around, my omens are very favourable.
From the beginning to the end of the year I find my pasturage...
Our calves gamble and await [. . . .]...
With my hide [the. . . .] is covered,
With my skin [the. . . .] is covered.
The warrior's arrows, the quiver [. . . .]
Fierce javelins carry [my. . . .]
Your masters' battle axes are [. . . .]
You cannot see the way, [you are like a] weakling,
Your eyes stare, but you do not [. . . .]
You do not travel the road, on the reins [. . . .']
The Horse opened his mouth and spoke, [addressing the superb Ox,]
'At my neighing ..[.
Battle-axes [. . .
Weapons [. . .
.. which throws down ..[. . .
[.].. the heart of a lion [. . .
At the ford of a river. [. . .
On the road over the mountains [. . .
You are troublesome, Ox, a chain [. . .
In your task there does not stand [. . .
Your fodder is bran, the ground [is your bed.]
How can you rival the Horse? [. . .
I [. . .] and tread a pavement of kiln-fired bricks,
[Close to] king and councillor is my stall located,
[The grooms] make ready [for me] plants, the greenery of the earth,
[. . .] they look after my magnificent drinking fountain.
[. . .]. the luscious herbage is cut small,
[. . .]. is superior, the special portion of a foal.
My flesh [is not] eaten.[. . .

b) Babylonian proverb, c. 1531–1155 BCE (Lambert 1960: 219)

When a lusty stallion was mounting a jenny-ass,
As he was mounting her he whispers in her ear,
'Let the foal which you will bear be a swift runner, like me;
Do not make it like an [ass] which suffers hard labour.'

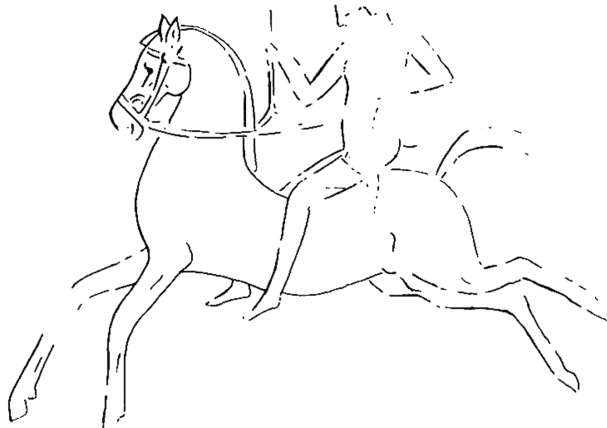
COMMENT: The Babylonian animal proverbs were a discrete literary genre known as the Animal Contest Fable and were part of a very ancient standard collection stretching back to

the Sumerian age and used for scribal school purposes (see WOLF no. 4). They reveal the horse to be a very high-status animal from early days. Indeed many of the Mesopotamian references to horses play on the superiority of the animal over others of its species – asses, mules, donkeys and onagers – or over other domesticated animals such as cows, bulls and oxen (Hyland 1990: 8–12).

When, in the Ur III period (third millennium BCE), the word for horse is first found in the written records of Mesopotamia it was labelled the ‘ass of the mountains’, referring to the fact that horses were being introduced into the river civilisation from the Iranian plateau and eastern Anatolia. The kings of Ur III fed horses to lions as symbols of their control over exotic lands, but their tough little chariots and wagons were drawn by asses, onagers or ass-onager hybrids. The introduction of the horse meant that new breeding methods could be used to produce an even stronger hybrid – the mule (see DONKEY no. 11). But the kings of Ur III began to value the horse for its appearance alone; King Shulgi (2029–1982 BCE) compared himself in one inscription to ‘a horse of the highway that swishes its tail’ (Anthony 2007: 417), and from this point on, the high status of the horse was guaranteed, although more as chariot animals than for riding. Zimri-Lim of Mari (1776–1761 BCE) was chided by one of his ministers for riding on horseback: ‘may my Lord not ride horses, [instead] let him ride a chariot or mule so that he might honour his kingship’ (Anthony 2007: 418; see also Way 2011: 82–6; on the connection of the mule and donkey with royalty see DONKEY no. 4). Zimri-Lim’s courtiers were happy for their king to ride in a chariot, but only mountain barbarians sat astride the backs of sweaty animals. Nonetheless, the Mesopotamian literature cited here reflects the high esteem accorded to the thoroughbred horse and demonstrate the wealth and attention lavished on its care and upkeep. The horse was the exemplary symbol of powerful monarchy, a mark of urban sophistication and of kingly prowess.

2. Egyptian horse-riding – ‘donkey style’

Egyptian relief from the tomb of Horemheb at Saqqara, late XVIII Dynasty (after Partridge 2002: 62)



COMMENT: The horse was a comparative latecomer to Egypt, appearing only in the Second Intermediate period during the Hyksos occupation of Lower Egypt (c. 1667–1570 BCE), when both the horse and the chariot were introduced from the Near East (Hyland 1990: 13–15). Subsequently, the Egyptians used Semitic names for horses and chariots (*susim* and *merkabot*) and horses were associated by the Egyptians with the Canaanite goddesses Anat (Astarte), known as

the ‘Mistress of Mares’ (a painted limestone fragment from Thebes shows the youthful, naked, Canaanite goddess galloping on horseback, see Partridge 1996: 113–17; Cotterell 2005: 98; Benzel 2013, esp. figs. 7, 11 and 12).

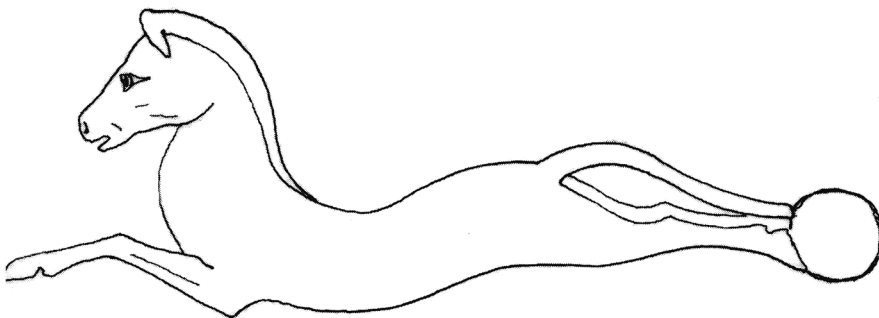
During the New Kingdom, the horse became a familiar sight, and there were many depictions of horses in art, particularly in Amarna-period iconography. Numerous Amarna Letters document the diplomatic exchange of horses between pharaohs and Near Eastern rulers and gift horses delivered to Egypt by Asiatic tribute-bearers are shown in tomb paintings (Johns 2006: 110–11; Curtis and Tallis 2012: 90–3).

Horses responded well to the Egyptian climate; the large, fertile Delta became the ideal location for large-scale breeding programmes and royal stud-farms flourished. Royalty and nobles had stable blocks attached to their palaces and estates and one New Kingdom grandee, Senenmut, may have had his horse buried with him near his tomb at Dier-el Bahri. Wrapped in layers of linen, though not mummified, the chestnut mare was laid in a large wooden coffin.

The Egyptian elite, like their Semitic forbears, never really took to riding, preferring to be pulled in a chariot. It is comparatively rare, therefore, to find – as here – images of riding on horseback (Schulman 1957 and Rommelare 1991 both assess the evidence thoroughly); it is clear that the Egyptians tended to sit directly on the horse’s back, right over its rear hips – the position used for riding a donkey (Hyland 1990: 50–1). Even battle scenes show cavalry riders in this position (Partridge 1996: 103–4; Partridge 2002: fig. 101; Cotterell 2005: 11) and although by the Late Period a more conventional riding-style had been established, no saddles or stirrups were ever used (on the origins of riding see Anthony 2007: 221–4). Reins and bridles are well attested though, as is the slitting of horses’ nostrils to compensate for impaired breathing caused by the pressure exerted by a noseband (Cotterell 2005: 58). The Egyptian use of the bit is demonstrated by the archaeological evidence of a horse burial found at Buhen fortress and dated to 1675 BCE. The horse died at the age of around nineteen years, and analysis of its ground-down teeth confirms that it had spent much of its life champing on a bronze bit (Cotterell 2005: 57; on bit-wear see also Anthony 2007: 206–16). Egyptian horses became famous throughout the eastern Mediterranean, and Assyrian conquerors, when extracting tribute, made sure to get as many of them as possible (below no. 6).

3. A horse at a flying gallop

*Whip handle made from ivory, garnet and paint, from
Egypt, reign of Amenhotep III, XVIII Dynasty (New York,
Metropolitan Museum of Art 26.7.1293)*



COMMENT: This small ivory handle of a light whip or fly whisk is carved in the form of a prancing or running horse – equestrians would call the position a ‘flying gallop’ – stained reddish-brown with a black mane. The eyes, one of which has fallen out, were inlaid with garnet. The exquisite carving of this piece, especially the gracefully arched back, typifies the ability of Egyptian artists to evoke the essential qualities of animals. Egyptian horses were small, compared with modern breeds. Of Arab appearance, they had an average height of just 1.35 metres (thirteen and a half hands) – at least to judge from surviving chariot yokes. Skewbald horses are also seen in Egyptian art, with piebald and dappled markings (Partridge 2002: fig. 98), suggesting that Arab-like horses were not the only type the Egyptians knew (Arab horses are never piebald).

The figurine captures the traits that the Egyptians most valued in a horse: speed, elegance and power. There is no doubt that the horse was a high-status animal, befitting an object of this quality and cost, and that pharaohs valued their steeds as prized possessions. Ramses III is noted ‘inspecting his horses with his own hands’ (Partridge 2002: 61).

4. Royal horse-lovers

a) The Great Sphinx Stela of Amenhotep II, Egypt, New Kingdom, XVIII Dynasty (after Cumming 1982: 19–21)

Now when he (Amenhotep II) was still a young prince he adored horses and delighted in them. He was one who was tenacious in working them, who knew their nature, and was conversant with their training, having close acquaintance with their disposition. This was heard of in the palace by his father [Thutmose III] . . . The heart of His Majesty was delighted when he heard it, rejoicing at that which was said regarding his eldest son, and he said to himself . . . ‘He is a loveable and handsome boy but as yet without understanding . . . he has put aside bodily whims and loves strength. . . .’ Thereupon His Majesty said to those who were beside him, ‘Let there be given to him large and fine horses from the stable of My Majesty which is in Memphis and say this to him: ‘Look after them and break them in, trot them and coax them when they are reluctant towards you.’

Now after that the king’s son was charged to care for the horses of the king’s stable and then he did that wherewith he had been charged. [The gods] Reshpu and Astarte rejoiced in him as did all that his heart desired. He raised horses without equal: they did not tire when he seized the reins, and they did not break out into a sweat at full gallop. He used to harness (them) with the bridle in Memphis that he might dismount at the resting place of Harmachis (the Great Sphinx at Giza).

b) The Piankhi Stela, XXIII Dynasty

His majesty proceeded to the stable of the horses and the quarters of the foals. When he saw they had been [left] to hunger he said: ‘I swear, as Re loves me, as my nose is refreshed by life: that my horses were made to starve pains me more than any other crime you committed in your recklessness! I would teach you to respect your neighbours. Do you not know god’s shade is above me and does not let my action fail? Would that another, whoever he might be, had done it for me! I would not have to reprimand him for it. I was fashioned in the womb, created in the egg of the god! The seed of the god is in me! By his *ka*, I act not without him; it is he who commands me to act!’

COMMENT: Some pharaohs, like Ramses II and Amenhotep II, were renowned as superlative horsemen. Amenhotep's passion for horses led to his appointment, when still Crown Prince, to the governorship of the royal stables. In fact, pharaohs often personally supervised the treatment their horses were getting: Rameses III was fond of visiting his stables and at his mortuary temple at Medinet Habu he is shown in the company of his stallions and mares. The pharaoh Piye, after conquering the Middle Egyptian town of Shamumu following a lengthy siege, accused the defeated prince Namlot of not feeding his horses and allowing them to starve. In the text (b), his anger as this outrageous neglect is palpable. Not surprisingly, Piankhi's tomb in the royal necropolis at El-Kurru at Napata includes burial chambers for his favourite horses.

5. The Egyptian war chariot

*Line drawing taken from a chariot belonging to
Thutmose IV from Thebes, XVIII Dynasty, c. 1400–1390 BCE
(drawing by Howard Carter, after Partridge 2002: 69)*



COMMENT: The badly damaged body of a chariot was discovered in the tomb of Thutmose IV in 1903 (Rommelaere 1991: 176–7; Partridge 1996: 113–17; Cotterell 2005). Its wooden frame was covered with a stucco plaster relief showing the pharaoh mounted in his chariot and wielding a bow as he slaughters his Asiatic enemies. New Kingdom pharaohs were quick to realise the full potential of the chariot and they employed it effectively in warfare.

The relief clearly shows the complex horse harnessing, so that it is possible to see how chariots were driven. The charioteer and the pair of horses pulling the chariot would have trained together with great intensity in order to form an effective team and the horses themselves were well-trained and well-cared-for. Amenhotep II was passionate about his horses and a carnelian seal depicts the pharaoh offering one of his steeds a handful of hay (Keel 1994: 61 fig. 18). We know the names of a few of pharaoh's much-loved horses: Seti I drove horses named 'Amun-Gives-Him-the-Victory' and 'Anat-is-Satisfied', while 'Victories-in-Thebes' and 'May-Mut-be-Satisfied' belonged to Ramses II and pulled his chariot during the battle of Kadesh (for royal horses see Johns 2006: 102–5). Chariot horses were provided with brightly woven back-cloths (which afforded protection too: Cotterell 2005: 56) and leather bridles adorned with ostrich plumes, all of which made for an impressive sight (Rommelaere 1991: 110–21).

Not surprisingly, chariots and trained horses were desirable commodities and they were often captured as war booty; Thutmose III captured 929 chariots and 2,041 horses following the battle of Megiddo while during his campaigning his successor, Amenhotep II, increased the chariot corps with a further 2,000 further captured chariots (Hyland 1990: 80).

Pharaoh's chariots were pulled by stallions but never mares; whether in the thick of battle, in the hunt or parading through the streets, the royal chariot was always drawn by stallions. In the Hebrew Song of Songs, the female lover is likened to 'a mare among the battle horses of pharaoh's chariots' (1.9). In other words, she distracts and turns the heads of all males who see her. Mares were indeed used as part of the sneaky tactics of war and one monument erected by an officer named Amenemhab (c. 1450 BCE) notes that in a battle against the Syrians, the enemy had sent a mare into the midst of the Egyptian cavalry to confuse and frustrate the chariot stallions. Amenemhab captured the mare and slit her belly open, thereby saving the Egyptian army from catastrophe (Keel 1994: 58). Herodotus (III.82) relates another story of a deceptive use of a mare.

6. Horse-training and veterinary practice

a) The Kikkuli cuneiform tablets, Hittite, c. 1360 BCE (excerpt from Tablet IV, after Marzahn 1996: 23–4)

[OBVERSE]

Subsequently they are given barley as rations. This they will (then) eat.

Each day he lets (them) trot for two and a half miles but lets them gallop over ten field-lengths.

Then he holds them back for three miles. Until the end of the fourth day he continues to let them trot. As soon as they are unharnessed, they are bathed with warm water, and they are given to drink. After that they are led into the stall. Then they are fed a 'handful' of hay and a 'handful' of wheat mixed. Then they eat two 'handfuls' of hay extra and half a 'handful' of wheat mixed. Then they eat two 'handfuls' of barley for their feed. When they have finished, they are tethered.

In the evening they are harnessed. Then he lets them trot for a mile. They are unharnessed again. They are then cared for and watered. Thereafter they are led into the stall. Then they eat three 'handfuls' of hay and two 'handfuls' of wheat mixed. When they are finished, they feed the night through on first-class hay.

The next morning they are watered. Thereafter they are harnessed. They are let to trot for two miles, but they are allowed to gallop seven field-lengths. As soon as they are unharnessed they are cared for, but they are not watered. They are then led into the stall. They are then tethered. As soon as it is noon they will eat a 'handful' of hay. In the evening they are harnessed. Then he lets them trot half a mile and twenty field-lengths; they are allowed to gallop a mile of 'seven rounds' gallop; it is called 'seven rounds.' As soon as they are unharnessed they are taken care of but not watered. Thereafter they are led into the stall. Then they eat first class hay throughout the night.

The next morning very early they are harnessed. They are then trotted for half a mile and twenty field-lengths. Thereafter they enter the city galloping. As soon as they are unharnessed they are covered again. They are led into the stall. But the inside of the stall must be made very warm. As soon as the horses become restless, they will start sweating; take off the halter and the blankets. Then the bridle is put on. Then they are led out. They are bathed with warm water. They are then led to the river. One lets them submerge totally five times.

The first time they are given nothing; the second time they are given a 'handful' of hay; the third time they are again given nothing; the fourth time they are again given a 'handful' of hay. This they eat. Water is given them each time but only with a *hazzila* measure. After the fifth time they are led home from the water and are led into the stall. They are then fed a bucket of mixed grits, and their feed is dealt out. They eat it all. . .

[REVERSE]

As soon as they are unharnessed they are bathed with warm water. They are then led down to the river. They are immersed seven times. The first and second time they are given nothing. As soon as they are led the third time from the water they are given a 'handful' of hay, and the fourth time they are again given nothing. As soon as they are led away from the river, their tails are twisted. Then they are harnessed. He lets them trot for half a mile; then he lets them gallop . . . seven rounds . . . Gallop for a mile; 'rounds seven' they are called. . .

The next morning they are harnessed. Then he lets them trot for two miles. As soon as they are unharnessed they are taken care of, but they are not watered. They are led into a stall. Then they are tethered. As soon as noon comes they are given a 'handful' of hay. In the evening they are harnessed. Then they are trotted for half a mile and twenty field lengths. . .

b) Assyrian training text from Aššur, c. 1200 BCE, Akkadian cuneiform tablet (excerpt from Tablet III.ii, after Marzahn 1996: 24–5)

[OBVERSE]

When the horses . . . have eaten, oil and urine have to be removed; three times they do half a course. Grain is given to them. They will eat it. With blankets they will go; then you will turn them loose, sprinkle them with water, anoint them with oil, and give them water to drink. Each will be given two 'handfuls' of grain, which they will eat. Each half a 'handful' of horse grain, and each will pour a handful of grain; they will eat it.

At the beginning of light they will eat fresh herbs; at dawn you will harness them. Turn them loose, giving them water to drink. [When] the horses for the morning ride have been chosen you will lay a bit in their mouth . . . the halter (?) . . . to the back legs (?), either three or . . . times . . . you will bind . . . anoint with oil . . . give them grain, which they will eat. When the horses . . . of horse grain, each half a 'handful' . . . you will give them; you will harness them at the moment of departure, two times a half a feat . . . you will harness them. When two times, or even three times . . . each a 'handful' of horse grain; you will give them each a handful of grain. They will eat it. At dawn you will harness them . . . be it two times, be it three times. . .

[REVERSE]

of the halters. . .

At the red glow of morning they will descend into the water, at the beginning . . . of bringing them there. . .

Hand of the XXX-kini, horse trainer, of the son of the. . . , according to the wording of the text. . .

c) Egyptian account of 'horse-breaking', XII Dynasty, Papyrus Lansing

Horses brought from the field, they forget their mothers. Yoked they go up and down on all his majesty's errands. They become like those that bore them, that stand in the stable. They do their utmost for fear of a beating.

d) Ugaritic hippiatric texts, c. 1300 BCE

Treatise concerning the well-being (health) of horses:

Section One

If a horse roars a *št*-measure of the scorpion-like plant should be pulverized and liquefied either in a solution of *daliqatu*-groats or of *mundu*-groats, and it (the remedy) should (then) be poured into his nose.

Section Two

If a horse discharges a putrid liquid, the *memetu* plant and a *bsql*-measure of the *crgz*-tree/plant should be pulverized together, and it (the remedy) should (then) be poured into his nose.

Section Three

Or if a horse discharges a putrid liquid, grain and bitter almond should be pulverized together, and it (the remedy) should (then) be poured into his nose.

Section Four

If a horse does not defecate or urinate, the sap of a *št*-measure of the *qulqullidnu*-tree/plant and a *st*-measure of the *crgz*-tree/plant should be pulverized together, and it (the remedy) should (then) be poured into his nose.

Section Five

If a horse is seized with pain, a *št*-measure of average quality *mksr* and a *št*-measure of the *škiru*-plant and the fruit of the lettuce plant should be pulverized together, and it (the remedy) should (then) be poured into his nose.

Section Six

Or if a horse is seized with pain, the *ninu*-plant and a *št*-measure of average quality *mksr* and a *št*-measure of the *uranu*-plant of *hmr*-quality should be pulverized together, and it (the remedy) should (then) be poured into his nose.

Section Seven

If a horse *yras*, a *št*-measure of the *pillulbillu* plant of *qt*-quality should be pulverized, and it (the remedy) should (then) be poured into his nose.

Section Eight

Or if a horse [discharges a putrid liquid and is leth]argic(?), coriander from the hills and a *št*-measure of [. . . and] the leaves of [. . .] should be pulverized [together, and it (the remedy) should (then) be poured [into his nose.]

Section Nine

Or if a horse roars, [. . .] of the juniper-tree [and] the fruit of the 'tbr-tree/plant <and> the seed of the [bitter al]mond similar to coriander [and (?) sim]ilar to fennel(?) [and] the *memetu*-plant and a *št*-measure of the *hmr*-plant and the 'fruit' of the *abukkātu*-plant and a measure of the sc[orpi]onlike plant] (and) the *memetu* plant (?) and the fruit of the lettuce-plant and a [bsq]i-measure of the *urdnū*-plant of *hmr*-quality should be pulverized together], and it (the remedy) should (then) be poured into his nose.

Section Ten

<Or> if <a horse> *yr'as* and *ykhp* incessantly, old fig-cakes and old raisins and flour of groats should be pulverized together, and it (the remedy) should (then) be poured into his nose.

COMMENT: Several treaties on horse care, training, and veterinary practice survive from the ancient Near East. These include fragments of a Hittite work created by a Mitannian horseman named Kikkuli (it begins with the words, 'Thus speaks Kukkuli, master horse-trainer from the land of Mitanni'; Raulwing 2005; Cotterell 2005: 72–6), a series of briefer Assyrian horse-training texts and Ugaritic veterinary texts. A short Egyptian text (d) speaks of a harsher horse-breaking method. These all illustrate daily regimes for getting chariot horses fit enough for military service and for hunting. Kikkuli's work in particular is very comprehensive in scope and detail, covering 184 days of intense training: after an introductory phase of training, any unfit horses unsuitable for military service would have been quickly weeded out from the tougher horses thought to have good potential. In the process of selection, horses would inevitably have received a number of stress injuries, like wind impairment, tendon ruptures, muscle strain and hoof problems. Incremental stress training, as advocated by Kikkuli, places undue pressure on any animal not able to sustain it so that only the fittest horses would be entered for the full training programme. After a three-week period of rest, grazing, expert stable-care and multiple bathings, anointings and feeding, incremental training then began. The detailed descriptions given in the text seem repetitive, but they do in fact vary chronologically as subtleties in the training regimen are introduced on a day-to-day basis: trotting, galloping, short sprints and endurance runs with or without chariots are all included. Some 123 racing exercises are described (Marzahn 1996). By day 178, horses had reached the toughest section of the course, with five sessions of intense gallops taking place over almost 48 miles of terrain.

The amount of feed given should be considered in light of the horses' size and shape: the Hittite steeds were probably the size of modern Welsh mountain ponies (Dent 1974: 59). On some days food and water were denied to the animals, especially after a heavy workout. This was a practical solution to curbing colic. Sometimes salt and malt were added to water. The text contains frequent references to washing ('submerging'), blanketing and anointing with oil – a common practice in the Near East – which was probably needed to restore the skin's oils which had been washed away (Hyland 1990: 40–1).

The Kikkuli texts clearly enjoyed a wide distribution and a long usage; they had a profound influence on later equestrianism and the Middle- and Neo-Assyrian horse-treatment texts are clearly modelled on Kikkuli's original, although the Assyrian regime is less severe. While the Assyrian texts do not adopt the full Kikkuli-regime, they are nonetheless also concerned with weeding out unfit horses from military service. The Kikkuli-method of training depends on the availability of an abundant labour force: even the quantities of cut grass needed as feed to last throughout one night indicates the presence of slaves employed to do little else but cut grass with a reaping hook. Dent (1974: 59) thereby argues for 'a special grade of low-caste labourer' like the type 'employed in Anglo-Indian establishments in this way in Victorian India'.

Surprisingly, we know comparatively little about the Egyptian method of training their horses, although included in Papyrus Lansing is a teacher's comparison of schoolboys with horses which suggests that their approach was rather hands-on and somewhat cruel.

7. Assyrian horse conscription

Akkadian cuneiform dispatches, reign of Esarhaddon (?), c. 680–669 BCE (Postgate 1974)

a) The mušarkisus: government ‘horse wranglers’ (Postgate 1974: 135–6, 255–7)

‘The trainees have come with me, and I have appointed them to be at the disposal of the *mušarkisus*. If the king requires them, they are at the disposal of the *mušarkisus* at Kalhu.’

‘Let them [bring] the men and the horses to me (and) let the *mušarkisus* not delay, (but) let them bring me the horses. . . ’

‘. . . Šummu-ilu, son of Aramis-bel-ilani, the *mušarkisu*, has appealed to me for intervention, and has claimed that his father died in enemy territory, and that 50 men (who were) under him took the 12 horses in their hands and came (back).

‘Gabbu-ana-aššur to the king:

All the straw in my province is reserved for (the royal city of) Sur-šarruken. Now the *mušarkisus* are going round after me, (and) there is no straw for their pack animals. Now, I shall do whatever the king commands.’

‘Mannu-ki-ninua to the king:

Let them appoint an officer to be at the disposal of a scribe and of the *mušarkisus*, to take them and their men and deliver (them) to them. As the king knows, the horses under me are dead.’

b) The Assyrian Horse Lists (Postgate 1974: 279–80, 393–8)

- i) Iala[. . .], the son of the king of Andia, is coming to . . . Nergal-bel-ušur, the [*mušarkisu*?], is with him.

16 red horses

13 grey horses

14 black horses

1 Haršaeon horse

1 . . . horse

6 mares

(and) his (own) 6 mules –

In all 51 horses of the son of the king of Andia.

- ii) 50 cavalry horses in Ahsana

184 horses across the river

20 cavalry horses in Halman

100 horses, reserves

In all, 404 horses.

60 horses

40 mules

as equipment (*iškaru*).

In all, 464 horses

20 mules.

20 horses of the Halmanaeon(s).

- iii) 85 horses, 6 [mares],
in all 91 – Ištar-šumu-taqiša.
20 horses – Ahua-eriba.
25 horses, [1 mare] . . .
In all, 26 – Sapunu
15 horses, 1 mare,
In all, 16. . .
14 horses, [4 mares],
In all, 18. . .
In all, 168 (/) horses,
14 mares
In all, 182 horses as equipment (*iškaru*).
6 horses, 2 mares, 1 filly.
. . .
1 horse, [3 mares]
In all, 4 horses . . .
2 horses, [3 mares]
In all, 5 – Marduk-eriba.
3 horses, 2 mares.
In all, 5 – Ahua-eriba;
In all, 12 horses, 10 mares,
1 filly
In all, 23 extra.
7 horses – Ištar-šumu-taqiša.
4 horses – Sapunu
1 horse – Ahua-eriba
1 [mare] – Ipqu
2 horses – Hadasanu
In all, 14 horses, 1 mare
In all, 15. . .
9 horses, 7 mares
In all, 16 – the Kalhaean(s), of Namurtu.
- iv) Horse provisions (Postgate 1974: 399)
The equipment (*ilku*) of the cavalry men, which is for the palace overseer, Pani:
3 homers of fodder, monthly;
7 bales of . . .
9 ½ (bales) of straw. . .
- v) Horse colours (Fales and Postgate 1995: 71–2)
[x . . . horses], 8 *irgi[nu]*-coloured horses,
[x . . .] horses, [x ho]rses of Haršean-type,
[. . .] mares, [x] red horses
[. . .]
[x] *irginu*-coloured horses, I [. . .] horse
(Break)
[1] red horse, 3 *irginu*-coloured horses,
[1]4 mares; in all 19 horses,

of Kurbanu.

[1] red [horse], 15 mares:

in all 21 horses, of Habasi.

[1 re]d [horse], 12 *irginu*-coloured horses,

[9] mares: in all 22 horses,

[of] Me'su.

[x] black [horse]s, 1 red horse,

[x] mares: in all 18 horses

[of] Ubar-Issar

[Grand total] 164 hor[ses],

[ca]re of Bana[ya].

vi) Sargon II and the royal monopoly on horses in Media and Armenia (Eighth Campaign 170–3; Liverani 2013: 555)

The people who dwell in this district (Zaranda) have no equal in the whole land of Urartu in terms of their ability in riding horses. Each year they take the foals born in this vast land, which they train for the royal army. Until (the foals) are brought into the district of Subi – which the Urartians call the land of the Mannans – and their performance is not observed, they do not ride them: they do not teach them to exit or turn and return (namely the riding movements) necessary for battle, and the yoke remains loose.

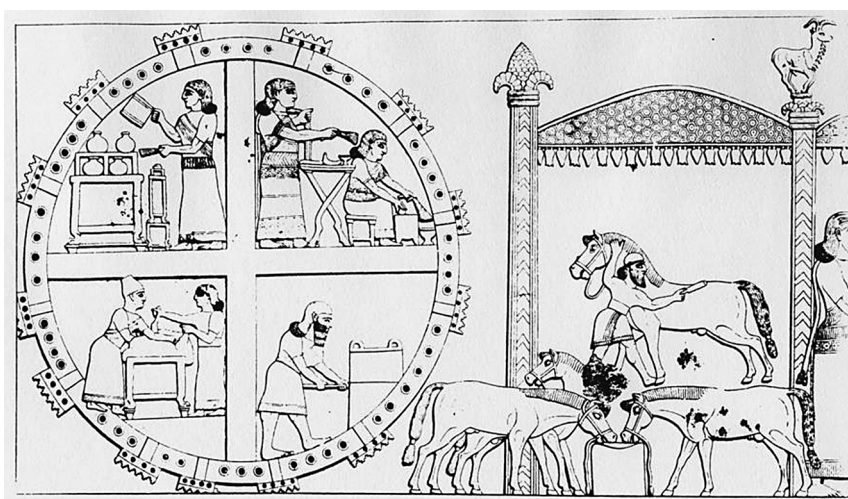
COMMENT: As the Assyrian Empire expanded, its fighting forces were required to cover ever more difficult and changing terrain, much of which was not suited for chariot warfare; to counter this, the Assyrians began to rely more and more on cavalry power. The subsequent importance of the horse to the Assyrian army caused its own problems, as the Assyrian heartlands were largely deprived of good grasslands and therefore offered little of the conditions needed to breed and support horses in large numbers. The Assyrians therefore established a special governmental organisation to provide a good supply of horses for the army. Horse recruitment officers known as *musarkisus* were appointed as royal officials to oversee supplies of horses from all the Empire's provinces (on average, two government 'horse wranglers' were assigned to each part of the Empire). They answered directly to the king and were aided by a retinue of scribes and grooms to ensure that enough horses were corralled and trained for the army's needs.

The *Musarkisus* had the authority to obtain horses year-round and were charged with the responsibility for sustaining them in an Empire-wide system of corrals and stables. The surviving Akkadian texts, as suggested in these examples, show that in Nineveh alone the officers corralled no less than 3,000 horses a month, the animals arriving in batches of 100 a day. The horse-lists confirm that the horses were obtained from every province of the king's domain; the animals are listed by sex and sometimes colour. It is clear that the horses were corralled for diverse purposes: one text, for instance, notes that of the 2,911 horses received in one month, 1,840 were to be employed as yoke horses in the chariot corps, while 27 were put to stud and 787 were used for the cavalry as mounts; these latter steeds were counted as the equipment (*iškaru*) of a soldier and it is clear that once assigned a horse, the soldier was responsible for its keep and welfare thereafter, even outside the campaigning season. The horse-wranglers were also responsible for securing adequate supplies of fodder, mules and camels for use in the transportation of the horses. The cuneiform texts reveal a sophisticated governmental system operating around the important figure of the high-status horse.

Of course, horses could also be captured as war booty, and one obvious advantage in this was that the horse came ready-trained. Horses were far more valuable as spoils of war than men or captive women and children. In the Hebrew bible, David captured 1,000 chariots from Hadadezer and subsequently hamstringed all but 100 of the horses (although hamstringing does not necessarily mean that horses were permanently rendered useless; O'Daniel Cantrell 2011: 42–3; 2 Samuel 8.4). Ahab is recorded capturing Aramaean chariots and horses, and immediately incorporating them into his forces (1 Kings 20. 21–34). The great kings of the Near East also maintained very extensive horse breeding operations and regularly engaged in lucrative horse trading (O'Daniel Cantrell 2011: 44–51).

8. Royal stables

Line drawing of a Neo-Assyrian palace relief of Ashurnasirpal II, c. 870 BCE (after Yadin 1963: 293)



COMMENT: The line drawing is based on a stone relief from the palace of Ashurnasirpal II at Nimrud. The detail of a groom brushing a war horse, while others feed from a trough, is set next to an unusual image of a bird's-eye view into an Assyrian tented battle camp depicting activities such as baking, cooking and religious ritual. The stabling of horses alters their natural behaviour and is part of their training protocol (above no. 5), strengthening the bond between horse and trainer and with other horses, allowing them to work side by side. Feeding troughs and watering systems are crucial to the training and domesticating regime. These features can be found at the Israelite archaeological site of Megiddo, a city 'dedicated in various degrees to the care and training of horses from the time of Thutmose III (1479 BCE) until well after its capture by the Assyrians in 732 BCE' (O'Daniel Cantrell 2011: 113).

Interestingly, the term 'stable' does not appear in the Hebrew scriptures. Instead, the Hebrew bible speaks of 'stalls' (Hebrew, *urôt*) of horses for his [Solomon's] chariots' (1 Kings 5.6, 10:26; 2 Chronicles 9.25), and for all kinds of cattle (2 Chronicles 32. 27–8). The term is also used of storehouses and sheepfolds. The Hebrew term *urôt* (sing. *urwâ*) is a loan-word from the Akkadian *urû* (*m*), 'stall'. In Middle Babylonian, however, the term may also mean 'stallion', and in Neo-Assyrian 'span', or 'team'. Whatever the translation, the Near Eastern vocabulary reflects the military use of horses, since what is of immediate significance is the number of horses in active military service or undergoing training, which necessitated their stalling, and not the number of

buildings, or the total number of horses owned by the monarchy. Chariot teams in the ancient Near East were usually stallions or occasionally geldings. Stabling provisions would be needed only for those horses which were in training. In all probability, the studs, brood mares and foals were allowed to roam freely through the upland valleys, as in ancient Greece (Anderson 1961: 4; 1 Kings 18.5 and 1 Samuel 9.3). The number given in 1 Kings 4.26 for Solomon's horses (40,000) is legendary and probably reflects the Achaemenid date for the composition of the text; Solomon is crafted in the image of the Persian Great King but is magnified in terms of wealth and power. King Ahab is credited with owning a more realistic 2,000 chariots and 4,000 to 6,000 horses (1 Kings 22.1–4). Assyrian kings were justifiably proud of their stables and the bond they established with prized horses. One seal impression for Nimrud shows a king training a horse as it rears up obediently on its hind legs (Keel 1994: 61 fig. 19).

9. The warhorse in action

a) Hebrew bible, Job 39.19–25

Do you give the horse its strength
or clothe its neck with a flowing mane?
Do you make it leap like a locust,
striking terror with its proud snorting?
It paws fiercely, rejoicing in its strength,
and charges into the fray.
It laughs at fear, afraid of nothing;
it does not shy away from the sword.
The quiver rattles against its side,
along with the flashing spear and lance.
In frenzied excitement it eats up the ground;
it cannot stand still when the trumpet sounds.
At the blast of the trumpet it snorts, 'Aha!'
It catches the scent of battle from afar,
the shout of commanders and the battle cry.

b) Hebrew bible, Nahum 2.4–5, 3.2–3

The chariots storm through the streets,
rushing back and forth through the squares.
They look like flaming torches;
they dart about like lightning.
Nineveh summons her picked troops,
yet they stumble on their way.
They dash to the city wall;
the protective shield is put in place. . .
The crack of whips,
the clatter of wheels,
galloping horses
and jolting chariots!
Charging cavalry,
flashing swords

and glittering spears!
Many casualties,
piles of dead,
bodies without number,
people stumbling over the corpses. . .

c) *Hebrew bible, Ezekiel 26.7, 10–11*

For this is what the Sovereign Lord says: From the north I am going to bring against Tyre Nebuchadnezzar king of Babylon, king of kings, with horses and chariots, with horsemen and a great army . . . His horses will be so many that they will cover you with dust. Your walls will tremble at the noise of the warhorses, wagons and chariots when he enters your gates as men enter a city whose walls have been broken through. The hooves of his horses will trample all your streets; he will kill your people with the sword, and your strong pillars will fall to the ground.

d) *Hebrew bible, Jeremiah 4.13, 29; 6.22–5; 8.16; 46.3–4, 9*

Look! He advances like the clouds,
his chariots come like a whirlwind,
his horses are swifter than eagles. . .
At the sound of horsemen and archers
every town takes to flight.
Some go into the thickets;
some climb up among the rocks.
All the towns are deserted;
no one lives in them.

Look, an army is coming
from the land of the north. . .
They sound like the roaring sea
as they ride on their horses;
they come like men in battle formation
to attack you, Daughter Zion.

The snorting of the enemy's horses
is heard from Dan;
at the neighing of their stallions
the whole land trembles.
They have come to devour
the land and everything in it,
the city and all who live there.

Harness the horses,
mount the steeds!
Take your positions
with helmets on! . . .
Charge, you horses!

Drive furiously, you charioteers!
March on, you warriors—men of Kush and Punt who carry shields,
men of Lydia who draw the bow.
But that day belongs to the Lord, the Lord Almighty—
a day of vengeance, for vengeance on his foes.

e) Hebrew bible, Habakkuk 1.6–8, 11

I am raising up the Babylonians,
that ruthless and impetuous people,
who sweep across the whole earth. . .
Their horses are swifter than leopards,
fiercer than wolves at dusk.
Their cavalry gallops headlong;
their horsemen come from afar.
They fly like an eagle swooping to devour. . .
They sweep past like the wind and go on—
guilty people, whose own strength is their god.

***f) Neo-Assyrian Akkadian inscription from the reign
of Sennacherib, 691 BCE (after Grayson 1963: lines 88–91
and George 2014: 42)***

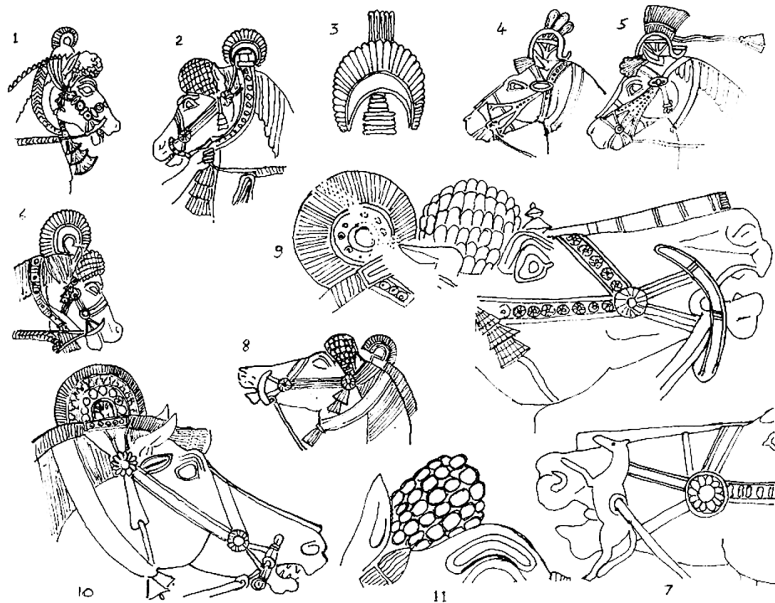
By command of the great god Ashur . . . I blasted against the enemy . . . I butchered
them forthwith like fattened steers tethered by rope and brought about their demise.
I slit their throats like sheep . . . The thoroughbred stallions harnessed to my chariot
plunged at a gallop into deep pools of their blood as into a river. The wheels of my
chariot . . . were awash with blood and gore . . . They abandoned their tents, to save
their lives, escaped by trampling over . . . corpses. . . , their hearts beating like a hunted
pigeon-chick's. Scalding their chariots with urine they fouled them with excrement. I
commanded my chariotry to chase after them, in order to cut down those running for
their lives wherever they could catch up with them.

COMMENT: The Hebrew bible contains several vivid descriptions of the war-horse in action which make for startlingly powerful reading; the rhetoric and imagery employed by the Hebrew scribes can likewise be found in other Near Eastern texts. It is clear that the war-horse was pivotal in battle. War-horses were ancient weapons and were trained to be terrifying fighting machines – the myths of flesh-eating mares underlined the reality that war-horses were trained (or forced) to kill. Regular scenes in Mesopotamian and Egyptian art depict the corpses of defeated enemies being pounded and crushed beneath the trampling hooves of horses; such images are not merely artistic licence, for horses were trained in this act (O'Daniel Cantrell 2011: 28–9). An inscription of Ramses III notes how 'the horses were quivering in every part of their bodies, prepared to crush the foreign countries under their hoofs' (cited in O'Daniel Cantrell 2011: 29), while 2 Kings 9.33 famously recalls how the hated queen Jezebel was trampled to death beneath horses' hooves (see DOG no. 7). Once battle commenced, chaos ensued, and while charioteers and riders aimed to control horses as functional weapons of war, the fact remained that horses could nonetheless panic and cause devastation. Indeed, one war tactic aimed at specifically panicking enemy horses.

On the battlefield horses worked hard (unlike oxen, horses will not stop working when they are tired, but will work until they collapse or die) and were difficult to kill. Arrow wounds and even lances tended to stimulate the animal rather than slow it down and even if pierced in an artery, a horse would take many hours to bleed to death, allowing for injured horses to be returned to camp and cared for, while fresh horses were led back into battle. The only fool-proof way to kill a horse swiftly was to strike it between the eyes with an axe, a brave task to undertake given a horse's size and strength; to protect this vulnerable spot, horses wore ornamented frontlets (see below). Incapacitation of a horse was perhaps a little easier to achieve by cutting its legs or tendons with scythes protruding from chariot axles. This was certainly practised in the ancient Near East (the last recorded incident being at the Battle of Gaugamela in 331 BCE), but even this was not so very effective since a chariot needed to manoeuvre very close to a team of galloping horses. The major goal in warfare was not in any case to kill the horses, but to capture them, ready trained for the yoke. Booty lists from across the Near East reveal this to be a reality, for it was the ability to amass, control and utilise horses in battle that gave kings prowess in war.

10. The war-horse in splendour

*Neo-Assyrian horse trappings (after Madhloom 1970: plate VIII);
1, 2, 3, 6 from Khorsabad; 4, 5, 11 from Nimrud; 7, 8, 9, 10 from Kuyunjik*

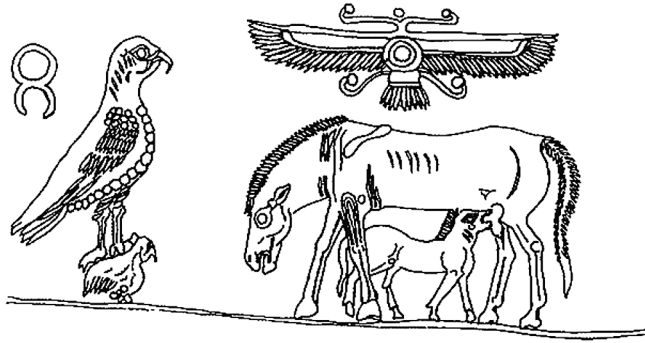


COMMENT: During the reigns of Sennacherib and Ashurbanipal, advances in riding skills permitted soldiers to ride and control their own mounts while fighting with spears and bows (Kelekna 2009: 104–7). Assyrian mounts and draft horses were controlled, therefore, with bridles consisting of headstalls, reins, cheek-pieces and bits, examples of which survive in the archaeology (Curtis and Tallis 2012: 110–15, 118–25; Drews 2004: 65–98; Foreman 2011: 136–9). In addition to the guiding equipment, Assyrian war horses were decorated with decorations attached to the headpieces of the bridles. They vary from splays of feathers to horsehair crests and cascades of tassels; sometimes sheets of cut metal were used to emboss the leather harnesses. Bells of bronze or iron were also attached to the harnesses where they would give added weight to the feel of

the reins and jingle to act as a kind of metronome, helping each horse to move in unison with others. Bells also served the purpose of drowning out the noise of battle and providing a familiar reassuring sound for the warhorse (O'Daniel Cantrell 2011: 21–2). In the Hebrew Song of Songs (1.10–11), the female lover is said to be bedecked in jewellery like a fine war-horse (Keel 1994: 59): 'your cheeks are comely with ornaments, your neck with strings of jewels. We will make you ornaments of gold, studded with silver.'

11. The horse in Persian life and thought

Achaemenid Persian cylinder seal, c. 500–450 BCE
(after Gabrielli 2006: frontispiece)



COMMENT: For a nomadic people like the Achaemenid Persians, the horse had a significant practical and symbolic purpose and the importance of horses among the ancient Iranian nobility is evidenced by the fact that many of them bore names compounded with the Old Persian word *aspa* – 'horse'. Several of Darius I's inscriptions note that Persia was a land containing both good men and good horses (DZe §1; DPd §2) and Herodotus famously states that Persian fathers were intent on teaching their sons 'to ride, to draw the bow, and to speak the truth' (1. 136; see also Str. 15. 3.18).

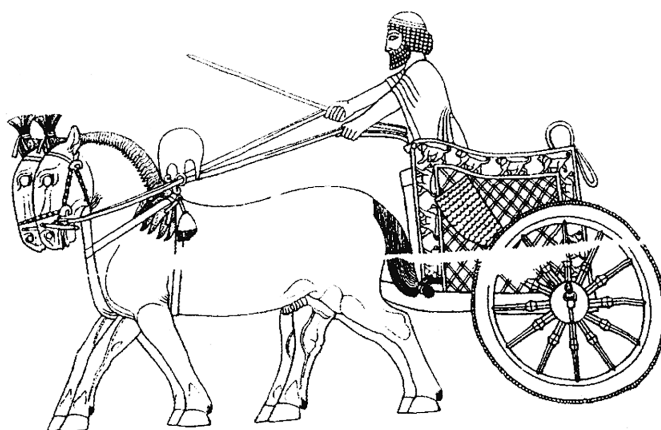
As demonstrated by this seal-image, the Persian fondness for the horse is evident, and here the common Mesopotamian motif of a cow suckling its calf is re-worked to show a mare and its offspring, protected beneath the wings of a sun-disk (perhaps the symbol of Ahuramazda; the falcon has no direct known correlation to the scene). Mare's milk was an important element of the Persian diet, and there can be little doubt that it was used in religious rituals, such as the initiation of kings at the ceremony of enthronement at Parsagade: 'The initiate must enter this, take off his own clothes and put on those worn by Cyrus the Elder before he became king; he must eat some fig-cake, chew some terebinth-wood and drink a cup of sour milk' (Ctesias F17 §3.2). It is reasonable to assume, given the importance of the horse to Achaemenid culture, that the sour milk ingested by monarchs was taken from a mare.

A companion to humans in life, the horse also played its role in the ceremonies of death and with the passing of a king or noble, his horse was included in the mourning procession with its mane cropped short (Hdt. IX.24). The horse played a noteworthy role in Achaemenid rituals and beliefs and just as kings were mounted high on horse-drawn chariots, so Ahuramazda and other deities had similar modes of transportation (Hdt. VII.40; Arr. *Anab.* II.11, III.15; Xen. *Cyrop.* VIII.3.12). Moreover, just as the finest present to give a Persian was a horse (Xen. *Anab.* I.2.27), so were the gods honoured with equine gifts such as the white horses which were sacrificed to the sun and to the waters (Hdt I.216, VII.113; I.189; Xen. *Cyr.* VIII.3.11–12; *Anab.* IV.5.35), both rituals being widely practised amongst Indo-European peoples (Clutton-Brock 1992; Kelekna 2009). As founder

of the Empire, Cyrus II was honoured with a horse sacrificed to his soul every month. Moreover, the infamous tale recounted by Herodotus (III.85) of how Darius I acquired his kingdom through a trick involving the neighing of his horse is, in all probability, a Greek misunderstanding of the Iranian practice of hippomancy, or divination through the behaviour of horses (see also Ctesias F13 §17), demonstrating the deep-seated importance of the horse in Iranian consciousness.

12. The Great King's Nisaeen horses

*Carved relief from the east staircase of the Apadana,
Persepolis, Iran, c. 500–470 BCE (after Gabrielli 2006: fig. 6)*



COMMENT: The premium Persian horses depicted here were bred in the alfalfa-rich plains of Media, and it was here that the main royal stud farms were located (Xen. *Anab.* IV.5.34; Str. *Geog.* XI.13.7, 14. 9; Polyb. X.70). Most prized of all were those steeds bred on the plains of Nisaea near Ecbatana and Bisitun, and Nisaeen horses, with their distinctive rounded foreheads, became celebrated for their magnificence, fine proportions and swiftness (Hdt. III.106, VII.40; Ar. *HA* 632a 30). Nisaea is said to have sustained 160,000 horses (Diod. XVII.110), although stiff competition came from Media and Armenia which were also used for breeding good steeds (Str. *Geog.* XI.13.7, 8, 14.9), as were the provinces of Babylonia (where one satrap possessed 800 stallions and 16,000 mares; Hdt I.192), Cilicia (which provided an annual tribute of 360 white horses (Hdt III.90)), Chorasmia, Bactria, Sogdiana and lands of the Saka which provided the Empire with its cavalry (Tuplin 2010). The Persepolis texts often speak of horses (as well as mules and donkeys), usually in the context of their food provisions and maintenance but also as property of the king or members of his family (PF 1668–9, 1675, 1793; PFa 24, 29; Azzoni and Dusinberre 2014). The texts also name individuals who safeguarded the welfare of the royal horses as well as groups of court officials serving as Masters of the Horse, as it were (PF1942, PF1943, PF1947, PF1948), and show that these men operated within a hierarchical system, could be paid well beyond the average ration-rate and could enjoy a diet of regular meat (Tuplin 2010: 132–3). This suggests a high rank at court for Masters of the Horse.

While there are no surviving monumental artistic representations of horses and riders in official Achaemenid art, textual evidence suggests that equine statues of horses with riders were commissioned for and by royalty and nobility (Hdt III.88). Small-scale representations of horses and cavalry figures survive in terracotta and metallic figurines, and representations on gems,

coins and textiles. The Persepolis reliefs show riderless horses regularly: of the twenty-three tribute delegations appearing on the Apadana staircases, seven present horses as part of their gifts (Medes, Armenians, Cappadocians, two groups of Sakas, Sagartians and Thracians) and there are also depictions of horse-drawn chariots conveyed by Syrians and Libyans. In addition, as seen here, the Great King's personal Nisaeon mounts are depicted along with his chariot (and the chariot belonging to the Crown Prince). In the royal chariot the Great King obviously took on a majestic appearance, 'outstanding amongst the rest' (Curt. IV 1.1) but, as Briant makes clear, 'the royal horses and chariot do not appear on the Persepolis reliefs simply for decoration. The royal chariot obviously carried ideological weight and the vehicle was clearly part of the "royal insignia"' (Briant 2002: 224).

As an obvious symbol of status and wealth, horses were closely connected to royal and courtly ideology and to the model warrior image (Hdt 9. 20, 22; DS 17.59.2; Ctesias F19 §1) but as a mark of conspicuous leisure, horses played a dominant role in the aristocratic pastimes of hunting and racing (Xen. Cyr. VIII.3.25, 33; see further Hdt VII.196). Favourite horses could lead a pampered existence (Hdt IX.70).

13. Mare and foal

***Greek bronze votive statuette, late eighth century BCE,
New York Metropolitan Museum of Art 1999.526 (gift of
Mrs. Frederick M. Stafford, in memory of Mr. Frederick
M. Stafford, 1999). Photograph courtesy of The Metropolitan
Museum of Art (www.metmuseum.org)***



COMMENT: This bronze votive group of mare and foal is one of many hundreds of such offerings dedicated at the Greek shrines of Olympia, Argos and Isthmia in the archaic period. Some depict horses alone, often stallions, while others represent mares with foals or groups of horses (Osborne 1998: 24–7). The panhellenic shrines attracted dedications from the Greek aristocracy as a means of demonstrating both their wealth (placing a bronze object on public

display in a temple) and their ability to travel to sites like Olympia, an indication of leisure and cosmopolitanism. The choice of the horse as the dedicatory animal par excellence in archaic Greece is testimony to its high social status (Osborne 1998: 26–7): as a ‘luxury animal’ it was only the elite who could afford to breed and keep horses. In both early sculpture and pot-painting the horse dominates as a motif – it is the first animal to appear on Geometric pottery (Coldstream 1977: 77–8) – and early Greek literature also attests to its importance. The Homeric heroes drive chariots pulled by impressive horses and receive ‘breaker of horses’ as an epithet; Achilles’ horses are semi-divine, offspring of the West Wind (Hom. *Il.* XVI.148–54) and one of them, Xanthos, even speaks (*Il.* XIX.404–17: see Heath 2005: 39–40). In archaic poetry, too, the horse plays a prominent role as metaphor – both Anacreon (84) and Alcman (fr. 1.45–59) compare young women to fine horses, and Semonides’ *Catalogue of Women* includes the mare-woman (56–69), who is beautiful to look at, but too high-bred to do any useful work in the house.

14. Athenian cavalry horses

***Extract from the Athenian cavalry archive, lead record strips,
Athens Agora Museum IL 1540–3, 1548, 1564, 1607–12, 1614***

Of Arkesas	(Belonging to) Arkesa[s of Eu]ony(mon) Black, snak[e, va]lue 700
Of Dioskouris	(Belonging to) Dioskoris of Euony(mon) Chestnut, lyre, value 1200
Of Dromo	(Belonging to) Dromokles of Kephis(ia) Chestnut, Cerberus, value 300
Of Epaine	(Belonging to) [E]paine(tos) of Eu[onym]on Chestnut, unbrande[d, va]lue 400
[. . .]	(Belonging to) Epi[g]enes of E[uonymon] Chestn[u]t, trident, [value . . .]
[Of Epig]en	(Belonging to) [Epige]nes of Eu[onymon] [. . .], snake, v[alue . . .]
Of Theome[des]	(Belonging to) [Theomedes of Ana]gy(rous) Spott[ed, helmet, va]lue 1000
Of Hieron	(Belonging to) Hieron of Anagyrous, chestnut Ox-head, value 300
Of Timonides	(Belonging to) Timonides of Eu[o]ny(mon), chestnut Unbranded, value 300
Of Philokrates of	(Belonging to) Philokrates of Euony(mon), black, Euonymos unbranded, value 300
Of Philokra	(Belonging to) Philokrates of Kephis(ia) Chestnut, unbranded, value 500
Of Chairion	(Belonging to) Chairion of Lamp(trai) Chestnut, crown, [v]alue 700

COMMENT: These inscriptions are part of an intriguing find of cavalry records from the Athenian Agora and Kerameikos. About 700 small lead tablets were discovered in the 1960s and 1970s in wells where they had been thrown in antiquity: each lists the name of a cavalryman and a description of his horse, together with its monetary value. The tablets formed part of an annual review of the cavalry providing a form of insurance: each man nominated an official

mount, described its identifying features and had it officially valued; should the horse then be killed in battle, he could be compensated up to a limit of 1,200 drachmas (Kroll 1977: 99). The list above is for a single tribe (Erechtheus) for one year in the 250s BCE.

Short though the inscriptions are, they tell us a great deal about the cavalry horses. Each horse is identified by colour and by its individual brand mark: in this list we see that most horses are chestnut, with two black and one dappled or spotted. Other lists include white, bay or dapple-grey horses. A wide variety of brands are recorded, some also known from vase-paintings, though many horses are *asemos*, unbranded. While most brands are simple identifiers – crown, helmet, lyre – the use of *boukephalos* ('oxhead') is interesting. We know from references in comedy that certain brands indicated a regional origin of particularly valuable horses: Sicyon in the Peloponnese exported horses of high quality marked with a 'san' or S, and the breeders of highly desirable Thessalian horses seem to have used similar stud-marks of the axe, the caduceus and the ox-head, implying that Alexander the Great's famous Bucephalus was not named for his distinctive appearance, but was instead a sought-after 'ox-head' horse (Kroll 1977: 86–7).

The large number of cavalry records found allows us to trace the ownership and value of horses over time, as cavalrymen are listed from one year to another, sometimes with the same horse which declines in value as it ages, but frequently with a different horse each year. This need not imply a high mortality rate among horses, since the men involved were the highest economic class at Athens and no doubt owned strings of horses: a new mount might be nominated as 'official horse' every few years, as the owner's preference changed. In a city where one drachma represented the daily wage for a skilled workman (Rhodes 2006: 11–12), horses valued at 500, 700 or 1,000 drachmai represented the peak of conspicuous consumption, and membership of the cavalry offered great opportunity for the conspicuous display of wealth in equine form.

15. Public exhibitions of horsemanship

Xenophon Cavalry Commander III

The following are the particular responsibilities of the *hipparchos* himself: he should sacrifice to the gods with good omens on behalf of the cavalry, and he should make sure that the processions at the festivals make a worthy spectacle, and that the other exhibitions for the city are as impressive as possible, those at the Academy, in the Lycaeum and at Phaleron and those in the Hippodrome. This is an outline: I will now explain how to make each event as splendid as possible.

With the processions, I think that they will be most gratifying both to the gods and to the spectators if there is an exhibition in the Agora, beginning at the Herms and going around a circular route paying honours to the gods. Similarly at the Dionysia the choruses in their performances are also worshipping the Twelve and the other gods. When the riders have completed the circuit back to the Herms, then I think it would look impressive if they went by regiment at a gallop to the Eleusinion. I will add a note on the position of the spears, which should not be permitted to strike against one another: each man should angle his spear between the ears of his horse, which makes a more warlike and regimented sight, and at the same time makes the troop seem more numerous. When the gallop is finished, it is best to ride slowly back to the temples by the same route: in this way everything that is impressive about a mounted man will be shown off to spectators and gods alike.

I realise that the cavalry are not accustomed to perform these kinds of manoeuvres but I believe that they are worthwhile and impressive, and pleasing to the spectators,

and I know too that in the past the cavalry have performed other new and impressive feats when the *hipparchoi* were able to persuade them to do so.

When they are parading in the Lycaean before the javelin-throwing, the best plan is to ride in two ranks of five tribes each, in battle formation, with the *hipparchoi* and the *phylarchoi* at the head of each rank, covering the whole width of the course. And when they reach the brow of the hill opposite the theatre it would make a good spectacle for the men to show their skill by galloping down the hill in large companies. Certainly if they are confident in their ability to gallop they will enjoy showing it off: but if they lack this skill you should see that they gain it, lest the enemy force them to do it in different circumstances.

I have described the formation which offers the best spectacle for these exhibitions, and if the commander, provided his horse is strong enough, always takes position with the outermost line, in this way he will be galloping for the whole of the time, and the outermost men with him, turn by turn, will also be galloping. Thus the Council will always be watching a galloping troop, and the horses which are not taking their turn on the outermost line will be able to rest a little.

When the exhibition takes place in the Hippodrome it is best to adopt a very broad formation, so that the horses completely fill the Hippodrome and drive out the people who are standing there. And in the mock battle, when the regiments flee from and pursue each other at speed, led by their commanders in two divisions of five tribes, the regiments should ride through each other. They will appear most fearsome when they charge each other head-on, stately when, after sweeping across the Hippodrome, they stand facing again, and splendid when they charge yet faster at the sound of the trumpet. When they have come to a halt, at a third trumpet blast they should charge each other at top speed, and when they have crossed again they should draw up in battle order ready to be dismissed, as is regular, and ride up to the Council. I think that these exercises would appear most warlike and novel: the commander should not ride more slowly than his *phylarchoi*, or in the same way.

When the exhibition takes place in the Academy on hard-packed earth, I offer the following advice: to avoid being thrown from their horses the men should lean backward when they charge, and prevent the horses from falling by reining them in at the turn, but where the course is straight they should gallop at top speed. In this way the spectacle for the Council will be both impressive and safe.

COMMENT: Xenophon's *On the Cavalry Commander* was written in the 360s BCE, as a pair with *On Horsemanship*: both are part of a move among philosophical writers towards the systematisation of knowledge and skill at this time. The treatise discusses the duties of the *hipparchoi*, the two annually elected leaders of the Athenian cavalry, including the organisation and training of the cavalrymen for both war and peace. Although the cavalry is usually seen as a purely military body, the extract here demonstrates its role in civic and religious life, and is our only source for the annual cycle of public shows and exhibitions by the cavalry units at Athens. Such exhibitions and mock-battles were common to most Mediterranean cultures; the best known is probably the *Lusus Troiae* at Rome (Virg. *Aen.* V.545–603).

Xenophon suggests that the cavalry in his own time needed to be better trained in manoeuvres: those described may not seem very difficult to a modern audience, but the lack of stirrups made them much more challenging, as the reference to falls indicates. But the aim of training was not solely practical: both treatises dwell on the opportunity afforded by the exhibitions for showing off skills of horsemanship, and *On Horsemanship* ch.11 discusses how to teach a horse

to prance and rear so as to make horse and rider as striking as possible; the comments on the spectacle offered by exhibition rides demonstrates another reason why horse ownership and membership of the cavalry were so prestigious.

The treatises also go into detail about methods of training horses, and Xenophon's approach to schooling is a thoughtful one, premised on gentleness and understanding: he criticises harsh methods which he says will produce a nervous and ungainly horse, and notes that the master's attention is the best guarantee of good treatment for the horses in his stable (*On Horsemanship* 4–5, 11). For a detailed account of horse management at this period, see Moore (2004).

16. The intelligence of horses

Pliny NH VII.154–61

The Scythian cavalry preserve some particularly striking stories of horses: a prince was challenged to a duel by his enemy and killed, but when the victor came to strip his body, the prince's horse killed him by kicking and biting him. Another horse, when the cover was removed from its eyes and it realised that it had mated with its mother, threw itself over a precipice and committed suicide; it is also said that in Reate a horse savaged a stable-hand for the same reason. For horses understand relationships of kin, and a filly in a herd prefers to keep company with her sister from the previous year rather than her mother. They are so amenable to training that the whole cavalry of the Sybarites is said to have performed a kind of dance to the accompaniment of music. These same Sybarite horses know when battle is coming, and they mourn for their masters when they die – sometimes they shed tears from grief. When King Nicomedes was killed his horse starved itself to death. Phylarchus tells the story of Centaretus, a Galatian, who took the horse of King Antiochus when he had been killed in battle, and mounted it in triumph: but the horse, in its fury at the death of its master, became unmanageable, galloped over a cliff and died together with its rider; and Philistus records that when Dionysius left his horse stuck in a bog, it pulled itself out and followed its master's tracks with a swarm of bees hanging in its mane, an omen which encouraged Dionysius to seize the tyranny.

The intelligence of horses is beyond words. Mounted spearmen find that their horses are so obedient that they will help them in difficult manoeuvres by the movement of their bodies, and the horses also pick up weapons from the ground and pass them to their riders. Chariot-horses in the circus games certainly demonstrate understanding of the shouts of encouragement and praise. At the Secular Games held by Claudius Caesar, in the races, a charioteer belonging to the Whites named Corax was thrown from his chariot at the starting-gates, but his horses took the lead and kept it by barging their opponents and doing everything to hamper their rivals as though they had a most skilful charioteer guiding them, and since they were too modest for human skill to be mastered by horses, they halted at the finish line when they had run the whole course. An even greater portent was seen long ago during the plebeian circus games, when a charioteer was thrown and the team raced up to the Capitol and three times around the temple just as though he was still with them; but the most remarkable example took place when a chariot team reached the same place from Veii, bearing the palm and crown which their charioteer, Ratumenna, had won at Veii, even though he had been thrown: the Porta Ratumenna was later named after him.

COMMENT: Pliny's rather rambling discussion of the intelligence of horses focuses on both their loyalty to their riders and their ability to learn and understand what is asked of them. Although Plutarch oddly does not include horses in his eulogistic *On the Intelligence of Animals*, Pliny presents examples of horses trained to perform dressage, assist their riders in war and able to race as a chariot-team without guidance. The belief that horses understood their role as competitors or warhorses was deep-seated: the fragmentary *Halieutica* ascribed to Ovid describes circus horses recognising and acknowledging the shouts of encouragement from the crowd (66–70). The reason that Pliny dwells on horses' skill in dressage and war, however, most probably relates to the fact that equestrian equipment remained in its infancy in Roman times: stirrups were unknown, and bits and bridles crude and often painful to the horse (Hyland 1990: ch. 10). A rider could not easily control a horse performing complex or precise movements and would instead rely on its training and innate intelligence, and the rapport between horse and rider.

17. A horse's tomb

CIL 12.1122 = CLE 1522

Borysthenes of the Alani,
Caesar's hunter,
Who used to fly
Over plains and marshes
And the Etruscan hills
Chasing the Pannonian boar,
Whom no boar dared
To harm in pursuit
With shining tusk
As it might a lesser horse,
Or ever sprinkled his tail
With foam from its mouth;
In the bloom of youth,
Limbs untouched by injury
Came to his death
And lies in this place.

COMMENT: Borysthenes, the Emperor Hadrian's favourite hunter, named after the Scythian river of his homeland, died in 121 CE and was commemorated with his own tomb bearing this inscription, apparently written by Hadrian himself (Dio LXIX.10.2); the tombstone itself was discovered at Apta in Gallia Narbonensis in the seventeenth century (Courtney 2003: 384–5). While antiquity preserves many stories of owners who grieved for their horses, and horses which received their own tomb, actual examples such as this are very few, perhaps because the expense of a burial for a horse was a form of conspicuous consumption. Certainly most of the horse tombs recorded belonged to the wealthiest classes: Alexander built a tomb for his Bucephalus, as did Augustus for his favourite horse (Pliny *NH* VIII.155), and the emperor Lucius Verus is said to have built a tomb for his favourite racehorse, Volucer, on the Vatican Hill (SHA *Verus* 6.3–4). Two epitaphs for horses exist in the *Greek Anthology*, VII.208 on an unnamed warhorse, and VII.212 on Aithyia, a swift-footed mare, but it is not clear whether these reflect actual burials or are verse exercises. Some horse burials, moreover, were the result of the owner's death rather than that of the horse: the Athenian Cimon's famous mares, for instance, which won the Olympic

chariot race three times in the sixth century BCE, were buried in a tomb opposite his own (Hdt. VI.103; Plut. *M. Cato* 5.4), but the implication is that they were killed as part of Cimon's funerary rites, a practice also recorded by the younger Pliny (*Letters* VI.2). Nevertheless, Solon (Plut. *Sol.* 7.3–4) is said to have spoken disapprovingly of men 'plunged into shameful and intolerable grief' at the deaths of dogs or horses, and these two animals more than any other seem to have engaged their owners' affections (Bodson 2000).

18. The October Horse

Festus Lexicon L190

The October Horse is the name given to the horse sacrificed to Mars in the *campus Martius* annually in the month of October. It is the right-hand horse of the winning pair in the chariot-race. A serious contest used to take place for possession of the head, between the inhabitants of the *Subura* and those of the *Via Sacra*: if the former won they would hang the head up on the wall of the *Regia*, if the latter, they would put it up on the *Mamillian Tower*. The horse's tail was carried as fast as possible to the *Regia*, so that blood from it could drip onto the hearth for the sake of taking part in the divine ritual. They say that the horse is sacrificed to Mars because he is a god of war, not, as ordinary people think, as an act of revenge because the Romans originate from Troy, and Troy was captured by means of the Wooden Horse. That many other peoples sacrifice horses is demonstrated by the Spartans, who offer a horse to the winds on the peak of Mount *Taygetus*, burning it so that their breath may scatter the ashes as widely as possible; also by the *Sallentini*, among whom Zeus is known as *Menzana*, who throw a horse alive into a fire, and the *Rhodians*, who every year dedicate a four-horse chariot to the Sun, casting it into the sea, because the Sun is carried around the world in such a chariot.

COMMENT: The ritual of the October Horse, described only here and in a few other brief references, is most unusual by Roman standards. It is the only example of horse sacrifice from Rome, and the ritual contains many aspects whose meaning is obscure – the battle over the head between two neighbourhoods of the city, the use of a spear to kill the victim and the role of the *Mamillii*. As *Festus* shows, some ancient writers tried to link it to the story of the Wooden Horse; in modern times it has been interpreted as either a military ritual, or to do with fertility (Rüpke 2007: 107–9). Bennet Pascal (1981) suggests that the ritual contains layers of religious practice which had accreted over time, accounting for its unusual nature. Drawing examples from Greece and non-Roman Italy, *Festus* argues that horse sacrifice was not uncommon, but as these cases show, horses were not regular sacrificial beasts because they were not eaten – the horses here are reduced to ashes or thrown into the sea – and Bodson (1978: 151–2) notes the significance attached to such an expensive and rare sacrifice.

19. White horses for royalty

a) Livy V.23.4–6

At the return of the dictator [Camillus], people of all ranks poured out to hail him, making the occasion more notable than any in the past, and his triumph surpassed all previous ones in its magnificence. Camillus himself was the focus of attention, driving into the city in a chariot drawn by white horses, something which was considered

unsuitable for a private citizen, and perhaps even for a mortal. People thought that the white horses placed the dictator on a level with Jupiter or Sol, as an impiety, and for that reason the triumph, though impressive, was not very well-received.

b) Livy XXIV.5.1–4

Even a good and moderate ruler would have found it difficult to gain popularity among the Syracusans, succeeding Hieron who was held in such affection; but Hieronymus, as though he wanted by his own faults to make the people wish his grandfather alive again, on his very first appearance demonstrated how much circumstances had changed. For the citizens, who had for so many years seen Hieron and his son Gelon dressed in the same manner as themselves and without any other mark of rank, now saw Hieronymus wearing a purple robe and a diadem, with armed attendants, and even sometimes driving out from the palace in a chariot drawn by white horses, as Dionysius the tyrant used to do.

COMMENT: The use of white horses to draw the royal chariot originated with the Persian Kings, and was adopted by the tyrants of Syracuse in the fourth century CE as a symbol of their power: Dionysius I and his sons Dionysius II and Nisaeus are all attested as driving a quadriga with a team of white horses (Diod. XIV.44.8; Pliny *NHV* II.110; Theop. *FGH* 1115 F187), and in the second passage above the second-century Syracusan king Hieronymus is said to have revived the tradition to demonstrate his status. The chariot with white horses was equally symbolic in Rome, but its adoption by Roman nobles is more difficult to interpret. Julius Caesar, at his triumph in 46 BCE, is supposed to have been awarded the right to drive white horses (Dio XLIII.14), and the practice is referred to in the early Principate (Tibullus I.7.7; Ov. *Pont.* II.8.50; *Ars Am.* I.214), but it is unclear whether it was a pre-existing tradition or a practice newly adopted by Caesar in his move towards monarchic power. The description of Camillus' triumph as dictator in 392 BCE would appear to indicate the former, but Livy (writing soon after Caesar's death), may have been trying to oppose the practice by giving it a disapproving historical precedent (Weinstock 1971: 68–75). There is no definitive evidence for the traditional use of white horses in the Roman triumph, although they were, as Livy indicates, used in religious processions. Ultimately, horses of any colour came to be replaced in the triumph by ever more exotic animals – elephants and stags (Beard 2007: 234–6) – as later emperors sought ever more conspicuous shows of wealth and power.

20. A star charioteer and his horses

ILS 5288, CIL 6.10047

I, Publius Aelius Gutta Calpurnius, son of Marius Rogatus, won victory for the Blue faction with these horses: Geminator, a black African horse, 92 races; Silvanus, a roan African horse, 105 races; Nitidus, a sorrel African horse, 52 races; Saxo, a black African horse, 60 races; I won the following big-prize races: 50 000 sesterces 1, 40 000 sesterces 9, 30 000 sesterces 17.

I, Publius Aelius Gutta Calpurnius, son of Marius Rogatus, won a thousand races for the Green faction with these horses: Danaus, a chestnut African horse, 19 races; Oceanus, a black horse, 209 races; Victor, a roan horse, 429 races; Vindex, a chestnut horse, 157 races. I won the following big-prize races: 40 000 sesterces 3, 30 000 sesterces 3.

As well as (?) the prizes listed above, I won 1127 victories: for the White faction, 102 prizes, including two rerun races, one 30 000 sesterces race, one 40 000 sesterces race, three 'first races', one with maiden horses, 83 single-chariot races, 7 two-chariot races, two three-chariot races. For the Red faction I won 78 victories: one rerun race, one 30 000 sesterces race, 42 single-chariot races, 32 two-chariot races, 3 three-chariot races, one four-chariot race. For the Blue faction I won 583 victories: seventeen 30 000 sesterces races, one six-horse chariot race, nine 40 000 sesterces races, one 50 000 sesterces race, 35 'first races', seven three-horse chariot races with a prize of 10 000 sesterces, 25 three-horse chariot races with a prize of 25 000 sesterces, one with maiden horses, one race at the quinquennial games, prize of 10 000 sesterces, one rerun; 334 single-chariot races, 184 two-chariot races, 65 three-chariot races. For the Green faction I won 364 victories, including one 30 000 sesterces race, two 40 000 sesterces races, one chariot-and-footrace, prize 60 000 sesterces, six 'first races', 116 single-chariot races, 184 two-chariot races, 64 three-chariot races. I set up this monument during my lifetime.

COMMENT: Gutta Calpurnius' monument to his outstanding achievements as *agitator* (chariot-ear) took the form of a huge tomb on the Via Flaminia in Rome with reliefs of racing quadrigae (Dyson 2010: 239). Apart from its detail of races and prizes won, the inscriptions are noteworthy for their singling out of the champion horses with which Gutta worked: the horses were as much the stars of the circus as modern racehorses, and we have preserved in inscriptions and mosaics more names for them than for any other animal in antiquity (Toynbee 2013: 177–8 analyses their variety and meaning). Chariots for racing used four-horse teams, and the individual horses named here were probably the inside horse of the team, the most significant in the race (Hyland 1990: 206–7). Where a breed is mentioned the horses are African, i.e., Libyan or Numidian; in Gutta's time African and Spanish horses were the preferred breeds for chariot-racing, although fashions changed over the centuries. Successful racehorses could expect excellent treatment, the most egregious example of which is the care lavished by the emperor Caligula on his favourite racehorse Incitatus of the Greens: Suetonius (*Cal.* 55.3) says that he was given a marble stall and ivory manger, purple blankets, a gem-studded collar and even his own household: for an interpretation of this, see Winterling (2009: 116).

21. The racehorse's old age

Greek Anthology IX.19 (*Archias*)

Eagle, once the glory of fleetfooted racehorses,
Whose body was once garlanded with crowns,
Whom Pythia, Apollo's oracle-singer, awarded the prize,
As he ran like a swift-winged bird,
And Nemea, nurse of the fierce lion,
Pisa too, and the double-shored Isthmus,
Now, bearing on his neck the collar, like a bridle,
Grinds Demeter's corn with the coarse stone,
Suffering a like fate to Heracles; for he too
After accomplishing such great deeds, bore the yoke of slavery.

COMMENT: The theme of the aged racehorse, his glory days over, put to common labour was attractive to Hellenistic writers, allowing as it does for pathos and poignancy of contrast. Several

epigrams in the *Greek Anthology* treat the theme (IX.20, 21), as do fables in the Aesopic tradition (Perry 318). Being put to work turning a mill to grind corn is plainly the worst fate that can be imagined for a horse, with its unremitting and tedious toil (see MULE no. 17). There is certainly some truth in the idea that an old racehorse would be put to work elsewhere, and Juvenal extends the idea to the unsuccessful offspring of pedigree racers, which he depicts changing hands for ever lower prices until they end up pulling a wagon or turning a mill (*Sat.* VIII.62–7). Ovid, on the other hand, speaks of the racehorse's happy retirement, 'grazing idly in the meadow' (*Amores* II.9.20; *Tristia* IV.8.19–20), and an edict of 371 CE required the emperor's racehorses to be kept in their retirement at public expense (Cod. Th. 15.10.1). The truth probably lay somewhere between the two: a wealthy owner could afford to retire a star horse, and the comments on pedigree horses indicate the systematic breeding from successful racers, but not every horse will have been as lucky.

22. Veterinary medicine

Vegetius Mulomedicina 2.45, 62, 80

On wounds to the shoulders

If the horse's shoulders have been injured, bleed the horse from the middle of both cannon bones and anoint the shoulders with the blood which flows from them, copiously mixed with powdered frankincense. If more blood flows than is needed, plaster the horse's own dung onto the vein and wrap it with bandages. On the following day carry out the same treatment, drawing blood from the same places and proceeding with the cure in the same way. The horse should not have barley to eat, but a little hay for three days. Then you should mix three *cyathi* of leek juice and a *hemina* of oil and pour it into the gullet with a horn. After six days the horse should be made to walk slowly, and when it has walked should be taken to a pool or river or to the sea where it can swim, with its foot bound up with a shoe of broom and cloths; it should be fed a more substantial diet so as to regain its former condition. If it is in mild discomfort, the horse should be rubbed in the sun with warm oil and wine; if it is in more serious pain, let air into the shoulder, piercing it eight fingers' width below the top of the mane, so as to avoid the cartilage. When you have blown air into it, strike the shoulder with a rod or soft switch, and rub it with salt and oil the same day; on the next you should use a poultice of the following composition: two *sextarii* of fine wheat flour, or if this is lacking, two *sextarii* of powdered wheat, mixed with sharp vinegar and three eggs, but you should use only the egg white, then add an ounce and a half of powdered frankincense. Knead this together well by hand and spread it on the shoulder, and for several days you should carefully foment the shoulder with hot water and fine hay to make it soften, and spread on the paste every day; also, having washed the shoulder with pure wine you should also add this ointment: half a pound of laurel berries, a *sextarius* of oil, a *sextarius* of good wine and three ounces of nitre, the nitre and laurel berries powdered and sieved. Foment the shoulder with hot water, then apply this ointment, warmed, in the sun, and rub it in for a long time. Afterwards the particular ointment for curing the shoulder is applied to it, and when the horse has recovered it should be sent to swim. If the horse has dislocated a shoulder against a wheel, as is common, set it and treat it with the aforementioned medicines. If the horse feels no pain, the last step is to cauterise it. These are the signs of pain in the shoulder: the horse draws his forefoot up as though

stiff; one should examine it carefully to see whether the cause is a blow or a fall – if it is the result of a blow, the limb should first be reset, and then the remaining treatments followed. If the shoulders are weighed down from bad humour or blood, you should bleed the horse from the chest, or use ointments.

If a horse has received a wound

If a horse has received a wound, you should rest him, so that he recovers properly and once recovered regains his condition, and he should not have any work imposed upon him which would reopen his scars while they are still fresh. An ulcer is healed if you apply to it Syrian galls burnt with honey. You should also mix powdered pine bark and fine quicklime in equal quantities and sprinkle them on the wound. Also, you should put on it the little balls of cypress, ground and sifted, and powdered oak bark. Furthermore, you should powder cuttle-bone and oyster shells, and mix with them an equal amount of soot from a bronze vase; if you grind all this well together and sprinkle it frequently on the wound, it will dry up and scar over more rapidly.

On looseness of the belly

We have often explained the methods by which a constricted belly may be loosened; now we must explain how a loose belly can be bound up. This is a particularly dangerous condition for animals, unless a speedy remedy is given. The principal treatment in this case is demonstrated by experiment to be half an ounce of wild pomegranate flower in rough wine or vinegar, poured through the mouth. You should also give burned barley in rough wine. Grinding together dates and Syrian galls makes a health-giving drink. The following recipe also gives relief: two ounces of wax, one pound coarse lard, half an ounce of pepper and half an ounce of pitch well ground together, with half an ounce of cassia, then divided into equal parts, made into little pellets and covered in melted wax, administered to the horse. A mixture of sheeps' dung (three denarii) and a *sextarius* of vinegar and honey-water can be given through a horn. Ground madder is also a binding treatment, if given in wine. African sponge dipped in liquid pitch, then burnt and the powder mixed with rough wine can be given as a drench. Likewise a *hemina* of wheat-flour, an ounce of goats' fat, two *heminas* of milk and three *heminas* of Sicilian wine can be mixed and administered. Also virgin nitre, if it is to be had, carefully ground to a powder, and half an ounce mixed with a hemina of vinegar, given as a medicine. The dust of pumice given as a drink in wine soon cures the condition.

COMMENT: These extracts from Vegetius' compendium of medicine for horses and mules give an idea of the variety of treatments offered by Greek and Roman veterinarians. Almost all veterinary medicine from antiquity concerned the treatment of equines, with a little on the care of oxen: this reflects the importance of the horse and mule to the army, both as cavalry and as draft animals, to the *cursus publicus* (see DONKEY no. 17) and their value as racehorses. Many veterinary professionals were in the service of these institutions, employed at state expense (Walker 2013: 313–14). Vegetius, a late fourth-century CE writer, collected and collated treatments from the corpus of veterinary texts, the Greek *Hippiatrica* and Latin *Mulomedicina*, and presented them organised by disease, from head to hoof. The remedies were based on the current scientific theory of humours and 'tainted blood', and the most common veterinary treatments, regulated in the Prices Edict of Diocletian (7.20–1), were bleeding, purging and care of the feet.

The format of the work, with large numbers of similar treatments for the same condition, suggests that remedies were simply tried in turn until a horse recovered, sometimes perhaps in

spite of the interventions. But many are not in themselves harmful, and some, like the rest and gentle exercise advised for injured horses, including swimming, are beneficial. The first extract refers to *solea sparteae*, shoes of rush, one of the early forms of hoof protection used, as here, to protect an injured leg or in difficult terrain. *Solea ferreae* with an iron base were also known and were employed where conditions were slippery or hard on the hooves, but regular shoeing was a post-Roman phenomenon, hence the importance of foot care (Hyland 1990: 123–5). Other items of ancient veterinary equipment have also been found, although their use is not always easy to identify (Stijn 2009).

As the often exotic and expensive ingredients of these remedies suggest, treatment of this kind was not common for ordinary domestic animals; Columella and Cato in their treatises *De Agricultura* include some simpler remedies for oxen, pigs and dogs, though these tend towards folklore and magic (Walker 2013: 325–31; Mezzabotta 2001).

Bibliography

- J.K. Anderson, *Ancient Greek Horsemanship* (Berkeley 1961).
D.W. Anthony, *The Horse, The Wheel and Language* (Princeton 2007).
A. Azzoni and E.R.M. Dussinberre, 'Persepolis Fortification Aramaic Tablet Seal 0002 and the keeping of horses', in W. Henkelman, C.E. Jones, M. Korzuh and C. Woods (eds), *Extraction and Control. Studies in Honour of Matthew W. Stolper* (Chicago 2014), 189–206.
M. Beard, *The Roman Triumph* (Cambridge, MA 2007).
C. Bennet Pascal, 'October Horse', *HSCP* 85 (1981), 261–91.
K. Benzel, 'Ornaments of interaction: jewelry in the late Bronze Age', in J. Aruz, S.B. Graff and T. Rakie (eds), *Cultures in Context. From Mesopotamia to the Mediterranean in the Second Millennium BCE* (New York 2013), 258–67.
L. Bodson, *Hiera Zoia: contribution à l'étude de la place de l'animal dans la religion grecque ancienne* (Brussels 1978).
L. Bodson, 'Motivations for pet-keeping in ancient Greece and Rome. A preliminary survey', in A. Podberscek et al. (eds), *Companion Animals and Us. Exploring the Relationships between People and Pets* (Cambridge, 2000), 27–41.
P. Briant, *From Cyrus to Alexander. A History of the Persian Empire* (Winona Lake 2002).
J. Clutton-Brock, *A Natural History of Domesticated Animals* (Cambridge 1987).
J. Clutton-Brock, *Horse Power: a history of the horse and the donkey in human societies* (Harvard 1992).
J.N. Coldstream, *Geometric Greece* (New York 1977).
A. Cotterell, *Chariot. The Astounding Rise and Fall of the World's First War Machine* (London 2005).
E. Courtney, *The Fragmentary Latin Poets* (Oxford 2003).
B. Cumming, *Egyptian Historical Records, Part 2: records of the later Eighteenth Dynasty* (Warminster 1982).
J. Curtis and N. Tallis, *The Horse from Arabia to Royal Ascot* (London 2012).
A. Dent, *The Horse Through Fifty Centuries of Civilization* (London 1974).
R. Drews, *Early Riders. The Beginnings of Mounted Warfare in Asia and Europe* (London 2004).
S.L. Dyson, *Rome: a living portrait of an ancient city* (Baltimore 2010).
F.M. Fales and J.N. Postgate, *Imperial Administrative Records, Part II. State Archives of Assyria XI* (Helsinki 1995).
B.A. Foreman, *Animal Metaphors and the People of Israel in the Book of Jeremiah* (Göttingen 2011).
M. Gabrielli, *Le cheval dans l'empire Achéménide* (Istanbul 2006).
A.R. George, 'The Poem of Erra and Ishum: a Babylonian poet's view of war', in H. Kennedy (ed.), *Warfare and Poetry in the Middle East* (London 2014), 39–71.
A.K. Grayson, 'The Walters Art Gallery Sennacherib Inscription', *Archiv für Orientforschung* 20 (1963), 83–96.
J. Heath, *The Talking Greeks: speech, animals and the other in Homer, Aeschylus and Plato* (Cambridge 2005).
A. Hyland, *Equus: the horse in the Roman world* (London 1990).
C. Johns, *Horse: history, myth, art* (London 2006).
O. Keel, *The Song of Songs* (Minneapolis 1994).
P. Kelekna, *The Horse in Human History* (Cambridge, 2009).
J.H. Kroll, 'An archive of the Athenian cavalry', *Hesperia* 46 (1977), 83–140.
W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960, repub. 1996).
M. Lichtheim, *Ancient Egyptian Literature. Volume II: The New Kingdom* (Berkeley 1973).
M. Liverani, *The Ancient Near East. History, Society and Economy* (London 2013).

- L. Llewellyn-Jones, *King and Court in Ancient Persia 559–331 BCE* (Edinburgh 2013).
- T.A. Madhloom, *The Chronology of Neo-Assyrian Art* (London 1970).
- J. Marzahn, 'Training instructions for horses from cuneiform texts: the Kikkuli Tablets and related material from the Vorderasiatisches Museum in Berlin', in D. Alexander (ed.), *Furusiyya: the horse in the art of the Near East* (Riyadh 1996), 22–6.
- M.R. Mezzabotta, 'Ethnoveterinary treatments in Roman antiquity: Cato the Elder's veterinary remedies', *Acta Classica* 44 (2001), 137–52.
- M.B. Moore, 'Horse care as depicted on Greek vases before 400 BC', *Metropolitan Museum Journal* 39 (2004), 35–67.
- D. O'Daniel Cantrell, *The Horsemen of Israel. Horses and Chariotry in Monarchic Israel (Ninth- Eighth Centuries BCE)* (Winona Lake 2011).
- D. Odell, 'Images of violence in the horse in Job 39:18–25', *Prooftexts* 13.2 (1993), 163–73.
- R. Osborne, *Archaic and Classical Greek Art* (Oxford and New York 1998).
- R.B. Partridge, *Transport in Ancient Egypt* (Guilford 1996).
- R.B. Partridge, *Fighting Pharaohs. Weapons and Warfare in Ancient Egypt* (Manchester 2002).
- J.N. Postgate, *Taxation and Conscription in the Assyrian Empire* (Rome 1974).
- P. Raulwing, 'The Kikkuli Text (CTH 284). Some interdisciplinary remarks on Hittite training texts for chariot horses in the second half of the 2nd millennium B.C.', in A. Gardeisen (ed.), *Les Équidés dans le monde méditerranéen antique. Actes du colloque organisé par l'École française d'Athènes, le Centre Camille Jullian, et l'UMR 5140 du CNRS, Athènes, 26–28 Novembre 2003*. (Monographies d'archéologie méditerranéenne 1) (Languedoc-Rousillon 2005), 61–75.
- P.J. Rhodes, *A History of the Classical Greek World 478–323 BC* (Malden 2006).
- C. Rommelare, *Les chevaux de nouvel empire Égyptien* (Paris 1991).
- J. Rüpke, *The Religion of the Romans* (trans. and ed. R. Gordon) (Cambridge and Malden MA 2007).
- A.R. Schulman, 'Egyptian representations of horsemen and riding in the New Kingdom', *Journal of Near Eastern Studies* 16.4 (1957), 263–71.
- H. Stijn, 'New views on the *forfex* of Virilis the veterinarian', *Journal of Archaeology in the Low Countries* 1 (2009), 87–95.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- C. Tuplin, 'All the King's horses: in search of Achaemenid cavalry', in M. Trundle and G. Fagan (eds), *New Perspectives on Ancient Warfare* (Leiden 2010), 101–82.
- E. Walker, *Horse* (London 2008).
- R.E. Walker, 'Roman veterinary medicine', Appendix to J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013), 301–43.
- K.C. Way, *Donkeys in the Biblical World* (Winona Lake 2011).
- S. Weinstock, *Divus Julius* (Oxford 1971).
- A. Winterling, 'Meaningful madness: the emperor Caligula', in A. Winterling, *Politics and Society in Imperial Rome* (Malden and Oxford 2009), 103–19.
- Y. Yadin, *The Art of Warfare in Biblical Lands in the Light of Archaeological Discovery* (London 1963).
- F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

DONKEY/MULE

Donkeys and mules did all the hard work in the ancient world. While the horse was prized for its noble appearance and fiery temperament, the hardy, patient and sure-footed donkey and mule provided motive power for transport and agriculture in the Mediterranean and Near East. Morphologically the donkey is similar to the horse, but smaller and rounder, and with a distinctive dark cross on its shoulders. It has much larger ears than a horse, which serve as an excellent 'radar' and as a cooling device in hot climates. The donkey is a grazing animal but, like the goat, will feed on bark and shrubs when the need arises, the fibrous plant diet being broken down in its intestinal tract (the donkey does not chew the cud). In the wild, donkeys are solitary creatures and unlike horses will not spontaneously form into herds; instead an adult donkey establishes a home range and breeds over a large area, which may be dominated by one jack. Donkeys do,

however, use their loud bray to remain in contact with others across great distances. The mule, cross-bred from horse and donkey, was also known from the earliest times (with the apparent exception of Egypt): mules combined the strength and aesthetic appeal of the horse with the hardiness and even temper of the donkey.

The donkey's most immediate ancestor is the African wild ass (*Equus africanus*), an endangered species now found in Ethiopia, Eritrea and Somalia. A variant species, the Arabian wild ass (*Equus hemionus*) – known as the onager – was introduced into human society early on (although onagers are notoriously difficult to tame). The domestication of the African wild ass and the breeding and development of the donkey (*E. africanus asinus*) for transport and field-labour has been traditionally located in North Africa, specifically pre-Dynastic Egypt, although this theory has been challenged. It is now conceded that the original range of *E. africanus* extended well beyond North Africa, as osteological material from sites in Syria, eastern Saudi Arabia, Oman, the Iraqi Jazirah and the Zagros foothills of Iran attest (Potts 2011: 160). The earliest Egyptian evidence of donkey, from El-Omari, dates to c. 4600–4400 BCE while in Iraq and Syria domesticated donkeys appeared during the Late Uruk period (c. 3600–3100 BCE) at Uruk, Tell Rubeidheh and Habuba Kabira (Boessneck and von den Driesch 1990). Even older material has been excavated in Iran dating to c. 4780–4490 BCE (Potts 2011: 169, below no. 2).

The donkey was a habitual presence in ancient Near Eastern societies: a work-mate, a mode of transportation, a status symbol, a provider of food, drink and hides, as well as a religious symbol (Vernus and Yoyotte 2005: 459–70; Way 2011). There is no doubt that the donkey (Akkadian *imēru*) was one of Near Eastern antiquity's most important animals. The domestic donkey (Greek *onos*, Latin *asinus*) was also present in Greek and Roman society from the earliest times, and although it did not receive the same attention from either writers or artists as the horse, the ass was clearly one of the commonest domestic animals: despite the claims of inflated prices paid for breeding donkey-jacks, they were the cheapest of equids and were used right down the social scale – the peasant and his ass are the focus of folk stories and proverbs alike. The Latin term for the mule, *mula*, is unusual in being feminine instead of masculine, apparently reflecting the Roman preference for female mules (mollies) for driving and as pack animals: uncastrated males can be difficult to handle, while gelded mules become sluggish (Griffith 2006: 231–2; Adams 1993).

1. Wild donkeys

a) Hebrew bible, Job 39.5–8, Jeremiah 2.23–24

Who let the wild donkey go free?

Who untied its ropes?

I gave it the wasteland as its home,
the salt flats as its habitat.

It laughs at the commotion in the town;
it does not hear a driver's shout.

It ranges the hills for its pasture
and searches for any green thing.

You are . . . [like] a wild donkey accustomed to the desert,
sniffing the wind in her craving—
in her heat who can restrain her?

Any males that pursue her need not tire themselves;
at mating time they will find her.

b) Neo-Sumerian hymn (after Foreman 2011: 151)

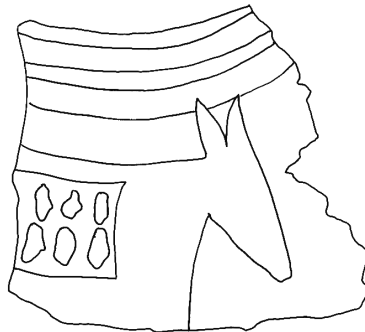
I, the king, I feared not, nor was I terrified,
Like a fierce lion I charged furiously,
Like a wild donkey I galloped,
With my heart full of joy, I ran onward.
Racing like a solitary wild donkey. . .

COMMENT: The wild donkey makes its home far from human habitation. It can even survive in the salt deserts of the world: the Great Rann of Kutch of northern India, for instance, is a vast saline desert and the prime habitat of the Asiatic wild donkey (Clines 2012: 1122). Job's wild donkey is probably envisaged as living in the arid vicinity of the Dead Sea, but it is nonetheless depicted as happy in its lifestyle of freedom, even if there is a price to pay for its liberty. Its need to search high and low for food is endless, but the wild donkey is not fastidious about what it eats (in fact, it can even chew and digest thorn bushes; see further Psalms 104.10–11; Job 6.5). Despite that, in times of drought, even the hardy wild donkey might suffer starvation and thirst, as made vividly and starkly clear by the prophet Jeremiah (14.6): 'Wild donkeys stand on the barren heights and pant like jackals; their eyes fail for lack of food' (see Feliks 1981: 120–2).

The prophet Jeremiah observes the sexual habits of the wild jenny and notes that once she has sniffed the wind in her pursuit of a mate, then her desire to copulate is unquenchable. He thus uses the donkey as a metaphor for Israel's harlotry. As Foreman (2011: 152) explains, 'the female wild donkey's reproductive instinct is so strong that one can be sure that she will be found near the males when she is in heat. In other words, Israel is sure to be found near her (metaphorical) lovers.' Yet the wild donkey is a timid creature and is easily startled and quickly frightened. Several neo-Assyrian inscriptions liken defeated enemies to donkeys in panicked flight. Indeed, the hunting of wild donkeys was a popular sport across the ancient Near East. Egyptian wall paintings show wild donkeys caught in the mayhem of a nobleman desert chase (Osborn and Osbornova 1998: cover; Dunand and Lichtenberg 2005: 36, fig. 16), while wall relief from the palace of Ashurbanipal at Nineveh depict terrified donkeys and foals shot with arrows or being wrestled to the ground by enormous mastiff dogs. An Akkadian 'student-text' from the reign of Tiglath-Pileser I (= SPORT no. 8) takes a familiar Assyrian literary theme, that of animals waiting to be slain, and shows the desert-dwelling wild donkeys as targets for royal violence and slaughter.

2. Early evidence for donkey domestication

Painted pottery shard from Tol-e Nurābād, Iran, c. 4780–4490 BCE



COMMENT: This painted ceramic shard, made of a fine, light brown ware and decorated with brown paint, comes from Tol-e Nurābād in western Fars. It shows a schematically rendered donkey with a patterned saddle cloth or pack on its back (Potts 2011: 169). The sherd suggests that donkey domestication occurred in the Zagros highlands at the same time (or perhaps earlier) that the similar domestication process was occurring in Egypt. The economic potential of using donkeys for transport and many forms of hard labour are clear from this early painted image since the donkey is already wearing a human-made saddle cloth. In all probability, the domestication of the donkey helped make possible the early expansion of human settlement on the Iranian Plateau during the fifth millennium BCE (Potts 2011).

3. Donkey list

***Old Babylonian period, Sumerian and Akkadian
glossary, XIIIth Tablet of the HAR.ra = ḫubullū
(after Oppenheim and Hartman 1945)***

donkey
saddle-donkey
male donkey of the fold
mule
donkey for the harness
donkey loaded with a pack
saddle donkey
donkey for the chariot
donkey for the wagon
donkey of the team
donkey of the Sea-(land) (i.e., camel?)
(quick) foal
braying donkey
hopping donkey
donkey belonging to a god
donkey belonging to the king
mountain-bred donkey
desert donkey
wild donkey
donkey whose thighs are open(ed) (?)
foal
braying foal
hopping [foal]
[quick fo]al (?)
foal of the f[old] (?)
donkey mare

COMMENT: The tablets of the *HAR-ra=ḫubullu* listing animal types are discussed in TAXONOMIES no. 1. This extract glosses Sumerian and Akkadian lexical lists for ‘donkey’. In fact, the entry under ‘donkey’ is long and detailed, suggesting that the donkey was a familiar part of daily life in Mesopotamia. The lexicon provides information on the physical differences between donkeys (sex, age, etc.), their habitat (domesticated and wild), the various tasks they

undertake (pack animal, plough animal) and their use as indicators of human rank and position. Particular attention is given to differentiating between foals although, interestingly, mares are rarely mentioned. (See also SHEEP, OX, GOAT.)

4. Onager-drawn carts

Line drawing of a detail from the Standard of Ur from the Royal Cemetery at Ur, Iraq, c. 2600 BCE (London, British Museum, BM 121201)



COMMENT: It is clear from the discovery of bones in burials that the onager was domesticated and lived in Mesopotamia by the fourth millennium BCE and that by the Early Bronze Age onagers were also to be found in eastern Mesopotamia and in Turkmenistan (Drews 2004: 29, 37, 41). Onagers were used to draw sledges or carts, like the type depicted on the famous standard of Ur. The reins which controlled the animals poked through two rings and were finally attached to the nose-rings of the onagers which pulled the cart. The earliest carts and chariots were drawn by oxen, but later onagers took over this task (and were replaced by horses only after many centuries). The Standard of Ur shows the arrangement utilised: four onagers, working in teams of two, pull each cart. Each animal is ornamented with tufted neck-bands and all are controlled by reins attached to their nose-rings (Bough 2011: 107; Curtis and Tallis 2012: 80–3; identified as donkeys by Chaline 2011: 75–6).

The onager was familiar in Egypt too. A fragment of a limestone tomb-painting represents the assessment of crops, for the purposes of tax, on the estate of the Theban nobleman, Nebamun (London, British Museum EA37982; Curtis and Tallis 2012: 19; Parkinson 2008: 110–17). The painting is divided into two registers, with a horse-drawn chariot above and an identical chariot drawn by onagers beneath. The two horses, one black, the other chestnut, are held by the driver and are depicted as frisky and alert with their mouths open, their hooves lifted from the ground and their long necks arched attentively, whereas the two blue-grey onagers (or perhaps hinnies) with dark grey manes are shown in a different attitude. Their bodies are thick-set and their short necks are bowed low as they reach for their fodder-bucket. Like the driver in the chariot behind them, they are at rest. There may be some kind of judgement about the comparative status – and perception – of the horse and the onager being made by the artist.

5. Royal donkeys

a) Hebrew bible, Genesis 49.10–11

The sceptre will not depart from Judah,
nor the ruler's staff from between his feet,
until he to whom it belongs shall come
and the obedience of the nations shall be his.
He will tether his donkey to a vine,
his colt to the choicest branch;
he will wash his garments in wine,
his robes in the blood of grapes.

b) Hebrew bible, 2 Kings 16.1–2

When David had gone a short distance beyond the summit, there was Ziba, the steward of Mephibosheth, waiting to meet him. He had a string of donkeys saddled and loaded with two hundred loaves of bread, a hundred cakes of raisins, a hundred cakes of figs and a skin of wine.

The king asked Ziba, 'Why have you brought these?'

Ziba answered, 'The donkeys are for the king's household to ride on, the bread and fruit are for the men to eat, and the wine is to refresh those who become exhausted in the wilderness.'

c) Hebrew bible, I Kings 1.33, 38

King David said, 'Call in Zadok the priest, Nathan the prophet and Benaiah son of Jehoiada.' When they came before the king, he said to them: 'Take your lord's servants with you and have Solomon my son mount my own mule (*pered*) and take him down to Gihon. There have Zadok the priest and Nathan the prophet anoint him king over Israel. Blow the trumpet and shout, "Long live King Solomon!" . . .'

So Zadok the priest, Nathan the prophet, Benaiah son of Jehoiada, the Kerethites and the Pelethites went down and had Solomon mount King David's mule, and they escorted him to Gihon. Zadok the priest took the horn of oil from the sacred tent and anointed Solomon. Then they sounded the trumpet and all the people shouted, 'Long live King Solomon!'

d) New Testament, Matthew 21.1–11

As they approached Jerusalem and came to Bethpage on the Mount of Olives, Jesus sent two disciples, saying to them, 'Go to the village ahead of you, and at once you will find a donkey tied there, with her colt by her. Untie them and bring them to me. If anyone says anything to you, say that the Lord needs them, and he will send them right away.'

This took place to fulfil what was spoken through the prophet [Zachariah 19.8–9]:

'Say to Daughter Zion,
"See, your king comes to you,
gentle and riding on a donkey,
and on a colt, the foal of a donkey."

The disciples went and did as Jesus had instructed them. They brought the donkey and the colt and placed their cloaks on them for Jesus to sit on. A very large crowd spread their cloaks on the road, while others cut branches from the trees and spread them on the road.

The crowds that went ahead of him and those that followed shouted,
'Hosanna to the Son of David!'
'Blessed is he who comes in the name of the Lord!'
'Hosanna in the highest heaven!'

COMMENT: The donkey, the most humble beast of burden across the entire Levant, acquired the status of a noble mount during the Bronze Age where it became regarded as the 'proper' animal to carry nobility (see comments on HORSE no. 1). As early as the Middle Bronze Age, donkeys and mules were ridden by royal hunters in bronze figurines. Indeed, many textual references and iconographic representations reflect the high social status of donkey-riders (Genesis 22.3, Judges 10.3–4). As Way (2011: 87) puts it, 'the donkey [was], so to speak, the "Mercedes-Benz" of the biblical world.'

The donkey became a symbol of humility through its association with Jesus whose triumphant entry into Jerusalem on the back of a donkey is one of the most enduring images of Western culture. Matthew's Gospel is the only occasion when Jesus is depicted riding instead of walking, and since pilgrims always entered Jerusalem on foot, Jesus' decision to ride on a donkey clearly marked him out as special. For the evangelist the episode is loaded with symbolic meaning: Matthew sees Jesus as fulfilling the prophecy of Zechariah, where the words of the prophet employ traditional and typical Hebrew parallelism ('riding on a donkey, and on a colt, the foal of a donkey'). Matthew is intent on his Jesus following the prophecy to the letter and so introduces two donkeys into his narrative: Jesus rides on a donkey while garments are placed on the back of its foal (Wilson 1992: 176). Bond emphasises that, more than anything else, the donkey represented Jesus arriving at the capital city in peace. Horses were the animal of war; donkeys the animal of peace and status. 'The symbolic act drew attention to Jesus' entry into the city and his prophetic authority' (Bond 2012: 138).

6. Ritual donkey burial

a) Sumerian hymn, The Death of Ur-Namma, c. 2095 BCE (Way 2011: 95)

His donkeys were to be found with the king; they were buried with him.
His donkeys were to be found with Ur-Namma; they were buried with him.

b) Hebrew bible, Exodus 13.13, 34.19–20

All the firstborn males of your livestock belong to the Lord. Redeem with a lamb every firstborn donkey, but if you do not redeem it, break its neck. Redeem every firstborn among your sons. . .

The first offspring of every womb belongs to me, including all the firstborn males of your livestock, whether from herd or flock. Redeem the firstborn donkey with a lamb, but if you do not redeem it, break its neck. Redeem all your firstborn sons.

c) Sumerian and Akkadian covenant texts (after Kugel 2008: 104, 707, n. 23)

Let us go slaughter a donkey (alternative = slaughter a foal).

COMMENT: From very early times the donkey had a special status in the ritual practices of the Near East and throughout the region complex and diverse donkey burials were created (see Way 2011 for the fullest exploration). Equids were used for ritual activities throughout Mesopotamia. Equid burials were especially prevalent in the Middle Bronze Age in southern Canaan and the Delta, and most of the burials in the Levant were of donkeys. There were major differences between donkey burials in the age of animals (the Amorites of Mari, for instance, sacrificed a donkey foal to conclude a covenant) and the parts of the animal skeleton interred.

Some donkey burials were closely associated with human graves, such as one, dated to about 3000 BCE, found at Abydos in middle Egypt, in an area where otherwise only high officials were buried. It contained ten donkey skeletons showing signs of wear due to loads having been placed on their backs, but they had apparently been in good health and been well cared for (Bough 2011: 63). This kind of donkey burial was clearly a prestige indicator as much as a funerary offering whereby the deceased was furnished with livestock in the afterlife. The Sumerian hymn cited here suggests that donkeys were intended for Ur-Namma's comfort in the next life as much as a display of his wealth in this life. Other donkey burials are unconnected to any human interment and the osteoarchaeological evidence often suggests that the equids were deliberately killed – but this is not always the case. Donkeys have also been found buried beneath or alongside wells, sometimes alongside remains of pigs, sheep, cattle and dogs. At the Middle Bronze Age site of Tel Haror in the western Negev, Israel, a young donkey was ritually deposited inside a circular installation within the city's sacred precinct, near to a Syrian-type temple. The well-preserved burial included the unique occurrence of a donkey being bridled, with the mouthpiece of a metal horse bit in its mouth and the metal remains of saddlebags on its back.

The Hebrew bible is a rich source for details of the deliberate slaughter of donkeys. In spite of their usefulness in daily life, donkeys were killed with alarming regularity, either in the mayhem of warfare (Exodus 9.3; Deuteronomy 28.31; Joshua 6.21, 7.24; Judges 6.4; 1 Samuel 8.16, 15.3, 22.19) or as part of a ritual practice. Nevertheless, aside from firstborn human sons, the firstborn of the donkey was the only creature which was allowed to be ransomed rather than sacrificed upon the altar of Yahweh. This was because the donkey was regarded as unclean and could not, therefore, be placed on the altar. If it was not ransomed, its neck had to be broken (Exodus 13.13, 34.19–20, best discussed by Way 2011: 176–83). For the Israelites the thought of being 'buried with the burial of a donkey' (Jeremiah 22.18–19) was actually no burial at all, for the phrase means that the human corpse was to be dragged outside the city gates and left for scavengers to eat.

7. Donkey maxims

**a) Sumerian proverbs and similes (Alster 1997 (1): 61;
Vanstiphout 2003: 31, 71, 145)**

My donkey is not fit for fast running; it is (only) fit for braying.

(Like a) donkey eating its own bedding.

A donkey's penis beats against its own belly.

A 'widowed' donkey makes a show of farting.

He was stumbling around in words like a feeding donkey in wheat.

A braying donkey must be kept on the straight path.

He was prancing proudly like a donkey-foal trying to enter the herd.
Like a big strong donkey he gallops; like a slender donkey, eager to run, he races on.

b) Egyptian proverbs (Lichtheim 1973: 168–70)

Do not [tie your donkey's foot to the palm tree (?)] lest he shake it.
The hissing of the snake is more effective than the braying of the donkey.
The waste of a donkey is carrying bricks.
One does not load a beam on a donkey.
The oxen harvest the barley and emmer, the donkeys eat it.
If a donkey (runs) with a horse it adopts its pace.
If a crocodile loves a donkey it puts on a wig.
One uses a horse to go after a [...]; one does not take a donkey to attain it.
Man is even more eager to copulate than a donkey; his purse is what restrains him.
One does not praise a donkey carrying a load because it brays.
The savage lion abandons his wrath and comes to resemble the timid donkey.

c) Akkadian lament (Foster 2005: 148)

He was moaning like a donkey foal separated from its mother.

d) Aramaic proverbs (Lindenberger 1983)

What is stronger than a braying donkey? The load.
A donkey which leaves its load and does not carry it shall take a load from its companion and take the burden which is not its [own with its own] and shall be made to bear a camel's load.
The donkey bends down to the jenny from love of her, and the birds . . .
The lion approached to greet the donkey: 'Peace be with you.' The donkey answered and said to the lion: 'I have lifted sand, and I have carried salt; but there is nothing which is heavier than grief! I have lifted bruised straw, and I have taken up bran; but there is nothing which is lighter than a time waster!'

e) Egyptian dream interpretations (Papyrus Carlsberg XIIb)

If she dreams of giving birth to a cat, she will have many children.
If she dreams of giving birth to a dog, she will have male children.
If she dreams of giving birth to an ass, she will have a stupid child.

***f) Egyptian letter from Deir el-Medina; New Kingdom,
XIX Dynasty (after Booth 2014: 24)***

I am like a donkey to you! If there is work: 'bring the donkey!' . . . If there is beer, though, you never ask for me!

COMMENT: Donkeys were indispensable to human society in the ancient Near East. In addition to providing milk, hides and sometimes meat, donkeys were the proverbial 'beasts of burden'. In agricultural work or in trade, people formed close bonds with donkeys and so, understandably,

they loom large in the literature of many Near Eastern cultures. The (often humorous) maxims and proverbs cited here are full of observations about the appearance and behaviour of donkeys, emphasising such character traits as stubbornness, slowness, greed, stupidity, innocence or lustiness.

Donkeys and mules were generally highly prized animals, commanding high prices in the market. Donkeys were lucrative resources for their owners and, unsurprisingly, they were frequently taken as war-pillage or simply stolen from neighbours or estates: 'The property (lit. equipment) that Zēru-ibni took from the house of Nabû-aḫḫē-šullim in the thirty-eighth year of Nebuchadnezzar, king of Babylon: One male donkey, one pregnant female donkey . . . One female donkey, its two-year-old offspring and a yearling' (Yale Babylonian Collection 3941 and 3819).

The bible mentions the donkey around 150 times (Borowski 1998: 90–9), an animal which was well suited to the terrain and climate of the Levant and was thus essential to an individual's wealth and economic survival (Genesis 12:16, 24:35, 30:43, 32:5; Job 1:3). Across the Near East donkeys were the primary means of transport of both humans and goods: Joseph's brothers, for instance, carried sacks of grain on donkey backs from Egypt to Canaan (Genesis 42–5) and the expression 'to saddle a donkey' was synonymous with beginning a journey. The donkey's role is even apparent in the Ugaritic Legend of Aqhat, as the hero's sister, Pagat, prepares the animal to carry their father to the drought-stricken fields: 'Weeping she saddled the donkey, weeping she harnessed the donkey, weeping she lifted her father, placed him on the back of the donkey, on the beautiful back of the donkey' (Parker 1997: 69).

In contrast, Egyptians were rarely ever shown riding donkey-back; a few rare occasions during the Old Kingdom portray tomb owners riding in a wooden palanquin borne on the back of a pair of plucky donkeys (Houlihan 1996: fig. 26; McFarland and Mourad 2012: 156–8), but otherwise the role of the donkey was strictly limited to the transport of goods. Teams of hard-working donkeys are routinely met with in painted and sculpted scenes of country life, being driven to and from harvest fields performing various agricultural tasks (Houlihan 1996: 29–33; Bough 2011: 46; McFarland and Mourad 2012: 84–5). Their legendary stubbornness was, of course, proverbial, and numerous vignettes capture field hands struggling with defiant beasts, as they attempt to get them to do some work and, consequently, scenes of cruelty are not unknown: in one Old Kingdom image a donkey's rump is made bloody from the blows of its frustrated driver (Houlihan 1996: pl. XIII; see McFarland and Mourad 2012: 87, fig. 13 for a second example).

8. Talking donkeys

a) Babylonian Fable Tablet (Lambert 1960: 210)

You . . . not [. . .
Spur and scourge. [. . .
You are like an eagle. [. . .
Like an idler [. . .
[When] the Riding-donkey [heard] this
He cried in his anger and [. . .
He continued shouting and [. . .
He opened his mouth [. . .
'How among the family of . . . [. . .
And as for me . . . [. . .
The vegetarian and [. . .
. . . my cheek . [. . .

b) Aramaic proverbs (Lindenberger 1983)

A man one day said to the wild donkey, 'Let me ride upon you, and I will look after you . . .' Said the wild donkey, 'Keep your maintenance and your fodder, I do not want you riding on me.' . . . Let not the rich man say, 'In my riches I am glorious.'

c) Hebrew bible, Numbers 22.21–35

Balaam got up in the morning, saddled his jenny and went with the Moabite officials. But God was very angry when he went, and the angel of the Lord stood in the road to oppose him. Balaam was riding on his jenny, and his two servants were with him. When the jenny saw the angel of the Lord standing in the road with a drawn sword in his hand, she turned off the road into a field. Balaam beat her to get her back on the road.

Then the angel of the Lord stood in a narrow path through the vineyards, with walls on both sides. When the jenny saw the angel of the Lord, she pressed close to the wall, crushing Balaam's foot against it. So he beat the jenny again.

Then the angel of the Lord moved on ahead and stood in a narrow place where there was no room to turn, either to the right or to the left. When the jenny saw the angel of the Lord, she lay down under Balaam, and he was angry and beat her with his staff. Then the Lord opened the jenny's mouth, and she said to Balaam, 'What have I done to you to make you beat me these three times?'

Balaam answered the jenny, 'You have made a fool of me! If only I had a sword in my hand, I would kill you right now.'

The jenny said to Balaam, 'Am I not your own jenny, which you have always ridden, to this day? Have I been in the habit of doing this to you?'

'No,' he said.

Then the Lord opened Balaam's eyes, and he saw the angel of the Lord standing in the road with his sword drawn. So he bowed low and fell facedown.

The angel of the Lord asked him, 'Why have you beaten your jenny these three times? I have come here to oppose you because your path is a reckless one before me. The jenny saw me and turned away from me these three times. If she had not turned away, I would certainly have killed you by now, but I would have spared her.'

Balaam said to the angel of the Lord, 'I have sinned. I did not realize you were standing in the road to oppose me. Now if you are displeased, I will go back.'

The angel of the Lord said to Balaam, 'Go with the men, but speak only what I tell you.' So Balaam went with Balak's officials.

COMMENT: It is common for animals to talk to humans in folklore. The Hebrew bible, however, does not typically portray talking animals and, in fact, only two do so: the serpent that tempted the woman in the Garden of Eden, and here, Balaam's donkey (the Hebrew text refers to Balaam's donkey in the feminine gender, making his donkey a jenny rather than a jack). Drawing on a long tradition of talking donkeys in Near Eastern folklore (and beyond: Eason 2008), the Balaam story actually demonstrates how well the characteristic behaviour of the donkey was observed: donkeys, like cattle, are without depth perception and are therefore extremely nervous about ledges and will simply freeze when frightened. Donkeys also have a strong sense of survival and if they deem something to be dangerous they will not approach it.

According to the Hebrew story, Balaam was an itinerant soothsayer, working for a wealthy patron, the paranoid King Balak, who had hired Baalam to curse Israel. The story works on the

idea that Balaam's words are false and deceitful (Israel should not be slandered so), while the donkey's utterances are truthful and just. As in many speaking-donkey stories, the jenny's complaint lies in her unjust treatment at the hands of an uncaring and selfish master: the donkey acts on instinct (guided by the unseen hand of Yahweh), so why does its master beat it? In the bible story, the donkey had never spoken before (and there is no record of it speaking again). Her behaviour had been exemplary as a loyal, dedicated, obedient, hard-working beast of burden. The jenny breaks her silence because she is empowered by Yahweh to do so. What she says seems to arise to a great degree from her own character: she warns Balaam for his life, but she does so in a clearly self-serving context by protecting herself and making a plea for her own fair-treatment.

9. Semites with antelopes and donkeys

Line drawing (detail) of an Egyptian wall-painting from the tomb of Khnumhotep II at Beni Hasan, early XII Dynasty, c. 1991–1783 BCE

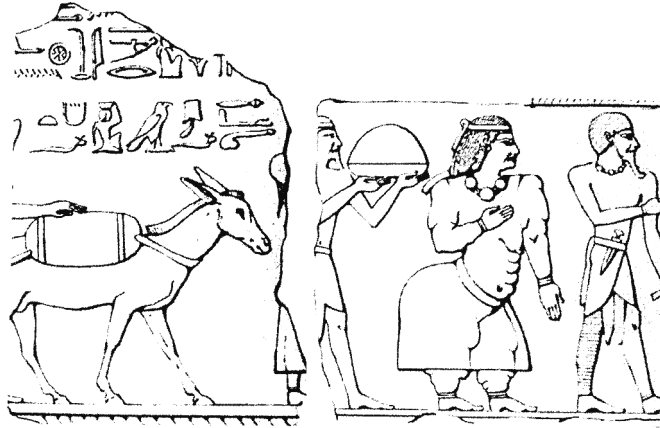


COMMENT: This famous painting on a tomb wall at Beni Hasan in Middle Egypt portrays Asiatic traders (probably from the Levant or Syria) in a donkey caravan coming down to Egypt with their families, their wares and their tribute (Kamrin 2013). Judging from the rich textual and iconographic records, the donkey was clearly a cultural-ideological marker to which high symbolic value was attached. This reflects the centrality of the donkey as a pack animal in societies for which caravans had a pivotal economic role. Donkeys played a key role in caravans, especially before the domestication of the camel. While Egyptian citizens were never shown riding on the back of donkeys, foreigners most definitely were.

In this scene, a group of Asiatic men are depicted bringing a Nubian ibex and a dorcas gazelle as a gift to the tomb owner, Khnumhotep II (see DOG no. 3 for Khnumhotep's image, and GAZELLE no. 4). Behind the group of men carrying weapons is the first of two donkeys bearing two children and a saddlebag. The children seem to be in some kind of textile carrier which is strapped on to the donkey's back with leather straps; the big saddlebag holds goods and work-gear, including what might be a bellows for use in smelting. A second donkey follows behind a line of four brightly dressed women. It carried a blanket or a bag decorated with zigzags in red dye on top of which is a small red satchel, a spear and another 'bellows'.

10. The Queen of Punt's ass

*Stone relief from the temple of Deir-el Bahri, Thebes,
XVIII Dynasty, reign of Hatshepsut*



COMMENT: The temple of Deir-el Bahri was built to perpetuate the memory of Queen Hatshepsut as ruler of Egypt. On the walls of one of the porticos, a series of reliefs commemorate a voyage to the land of Punt (possibly on the shores of the Red Sea). One of the relief-scenes shows the Egyptians meeting the local king and his wife, Queen Ati, portrayed as a woman of very ample proportions (Houlihan 2001: 57). She is depicted near a very tiny donkey plodding along at the rear and wearing a padded saddle-bag. Above it is an inscription explaining its presence in the company of royalty: 'The donkey that has to carry the queen.' Clearly the artist was amused by the idea of the delicate animal carrying the obese queen. This may have struck the ancient Egyptians as doubly funny, since they themselves apparently did not ride donkeys and only used them as pack animals so that the idea that a woman, let alone a queen, might ride one is doubly absurd.

11. Donkey-love

a) Egyptian ostrakon, late New Kingdom from Deir el-Medina (after McDowell 1999: 172)

The magistrates of Thebes sent two messengers and they took hold of the donkey that you gave me. But I was stronger than them: I took it (back), and I am sending it to you via the scribe Ser-Amun.

Now look, look – I have a good donkey! Look, the best! And you shall accept it – indeed, its face is large – and (so) do not seek a quarrel. . .

b) Egyptian Demotic papyrus, c. 160 BCE; Berlin P 3093

. . . Have a look at the she-donkey of Psen////, son of Horos, . . . a most beautiful donkey. . . She is a top donkey, a she-donkey with perfect proportions. . .

**c) Ostrakon from Thebes, XIX or XX Dynasty
(New York, Metropolitan Museum 23.3.8). Photograph courtesy of
The Metropolitan Museum of Art (www.metmuseum.org)**

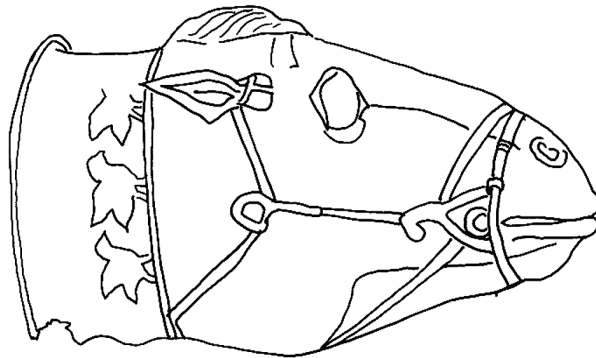


COMMENT: Given that donkeys were staples of Egyptian life and that they were daily sights in the villages and towns throughout the country, it is understandable that people could become very attached to them and could understand their strengths and foibles very well.

Donkeys are admired for their loyalty, their hard work and even their looks. Figure 2.33, a little sketch made by an artist from the workmen's village of Deir el-Medina, for instance, shows a donkey alert and ready to work; it is clearly a study made from life and testifies to the bond which existed between the animal and his owner.

12. Persian donkey

***Silver vessel in the form of a donkey's head, Achaemenid Iran,
c. 480 BCE (New York, Metropolitan Museum of Art 47.100.87)***



COMMENT: Said to have been found in Mazandaran, Iran, and mistakenly identified as a horse (Pope 1935: 1), this stylised drinking vessel or jug is in fact the representation of a donkey. It

contains some charming observations: the animal's short, thick muzzle, with its flaring nostrils, and soft velvety mouth and lips are all very well captured, as are the arrangements of the bits and reins; there is almost a movement to the mouth, as though the donkey was chewing the bit. The eye too (though damaged) is well proportioned. The ears, however, though accurately shaped, are clearly not represented to the correct scale. This beautiful silver head compares well to other donkey-images created in high relief on the walls of the Apadana staircases at Persepolis; the donkeys even share the same bits (Bough 2011: 63). There can be little doubt that this exquisite piece of silverware shows not the Great King's chariot horse, but a prized donkey.

Silverwork of this kind was much imitated by Greek potters, and large numbers of very similar ceramic *rhyta*, some in the form of donkeys' or mules' heads, were made at centres of production in Athens and southern Italy (Hoffmann 1989). Donkey *rhyta* are in fact far more numerous than those in the form of horses, particularly at Athens, probably reflecting the Persians' more positive attitude towards them.

13. The useful ass

Columella De re rustica 7.1

In our discussion of the lesser farm animals, Publius Silvinus, first place shall go to the cheap and commonplace ass from the region of Arcadia, which many writers on agriculture think worthy of particular attention when it comes to buying and caring for beasts of burden. And this is correct, for the donkey can be raised even in those places which have no pasture, because it is content with a thin diet of any quality, being able to eat leaves, or thorny bushes, or a bundle of twigs offered to it, and even chaff, which is readily available almost everywhere. It is also able to tolerate the violence and neglect of a poor master, bearing blows and toil without complaint, so that of all plough-animals it is the last to fail. It is able to bear the hardest work on the least food, and rarely becomes ill. Donkeys carry out a great deal of necessary work with the smallest care, so they can break up fine soil, such as is found in Baetica and across Libya, with a light plough, and can pull heavy loads in a cart. And in the words of our most famous poet, often,

'The peasant loads the sides of his slow ass
with cheap apples, and returns from the city
with a dressed millstone or a lump of black pitch.'

Indeed grinding grain in the mill is now the almost invariable work of this animal. For all these reasons the donkey is essential on any estate: as I have said, it can carry anything that is required into town, and bring back a load on its back or neck. The kind of ass one should buy, and the best method of caring for it, I have already discussed adequately in a previous book, which gave advice on the more valuable livestock.

COMMENT: Columella's paean to the donkey paints a sorry picture of its resilience in the face of neglect and harsh treatment, but also testifies to its ubiquity and usefulness: all agricultural writers assume that the ass will provide the primary transport on the ancient farm, carrying wood and dung as well as produce, and drawing both carts and ploughs. Cato, setting out the necessary equipment for the model farm, advises that four asses should be brought for the olive plantation, three to carry dung and one to turn the mill, and three for the vineyard, two for draught and one for the mill (*De agricultura* 10.1, 11.1; on the mill, see no. 15 below). The idea that donkeys

will tolerate poor diet and underfeeding is found in Greek sources too: Archilochus fr. 19 refers to the craggy mountains of Thasos as like an ass's backbone, and Calder (2011: 56–7) notes some disturbing descriptions and images of underfed donkeys with sores from poor harnessing and heavy loads. Donkeys were not trained to be responsive to a rider as horses were, but were driven with a simple halter and stick, hence the very frequent reference to blows and beating; as Calder (2011: 47) explains, a donkey which perceives danger will 'freeze' and refuse to move, giving them an undeserved reputation for stubbornness and being unmoved by blows.

14. Donkeys and their owners

Life of Aesop 140 (Perry 381): The farmer and his donkeys

There was once a farmer who had grown old in the countryside, who had never seen the city. So he asked his sons to arrange for him to go and see the city before he died. His sons yoked the donkey-cart for him and told him, 'Just drive, and the donkeys will take you to the city.' But a storm came on as they journeyed, and darkness fell, and the donkeys strayed from the road and carried the old man off to the edge of a precipice. He, seeing the danger he was in, cried out, 'What wrong have I done, Zeus, to deserve such a death, and not even because of horses, but because of these contemptible donkeys?'

Plutarch Antony 65.3

It is said that Caesar left his tent before dawn to go around his ships, and on his way happened to meet a man driving a donkey; he asked the man's name, and the driver, recognising Caesar, said, 'My name is Eutuchos (Good Fortune) and my donkey is called Nikon (Victory).' As a result, when Caesar later set up the beaks of his ships there as a memorial, he also set up a bronze statue of the man and his donkey.

Aesop 357 (Perry): The donkey and the horse

A donkey and a horse belonged to the same man, and each had his own duties to fulfil. But the horse was treated with much greater care: he was fed more generously, his mane and forelock were brushed out by the grooms, and he was washed with water every day. The donkey, in contrast, was completely worn out by the heavy burdens which he had to carry. Then one day the man mounted the horse and rode off to war, and in the fray of battle the horse was wounded and killed. Seeing his fate, the donkey decided that he was happy with his life of heavy labour.

The moral of the story is that a life of poverty which is free from risk is far preferable to a wealthy life with many dangers.

COMMENT: The relationship between the peasant and his donkey is an interesting one. Both Calder and Griffith note that while Greek literature in general paints a picture of the donkey as an unloved animal, overworked, underfed and mistreated, a donkey can live for as long as forty years, most of them working, and could thus develop an individual relationship with its owner in a way not possible for shorter-lived animals. The first fable above supports the idea with its image of the farmer becoming reliant on the donkeys who know their way to the city better than he does. Plutarch's anecdote, set in Greece at Actium, is the one indication which we have for the naming of donkeys in the ancient world: none are given names in art, but while the wily

peasant's comment was no doubt opportunist, the idea of a donkey with a personal name cannot have been an odd one.

The contrast between the donkey and the horse in the third fable seems to conform to expectation about the treatment of high- and low-status equids, but it in fact reveals some of the same underlying ideas: a donkey, though worked hard, would have as long a working life as possible, and an owner had an obvious interest in keeping a valuable investment in working condition. The horse, on the other hand, as a prestige animal, had a paradoxically less close relationship with its owner: not only were they placed in danger in the rigours of war service, but they were often traded or gambled away as part of the elite lifestyle (Lewis 2017). Griffith also makes the counter-intuitive suggestion that the handling of donkeys and mules was in fact considerably less demanding for the individual animal compared to that of the horse: pack animals carried a load, but were usually guided by a halter or driven with a stick, allowing them considerable autonomy, whereas horses were trained to the notoriously painful ancient bit and bridle, and were required to be responsive to a rider's physical commands (Griffith 2006: 330–1). The stereotype of the stubborn donkey and obedient horse may actually indicate something about the quality of life of each.

15. Good and harsh treatment

Apuleius, Metamorphosis VII.14–18

A council of their most influential friends was summoned to decide in what way I could best be rewarded. One man thought that I should be kept in my stable and allowed to feed at my leisure on barley, beans and vetches; but an alternative opinion prevailed, that I should be set free to run and play among the horses in the lush meadows and sire mules for the stable-masters as a prized stud ass. So they immediately summoned the head groom and handed me over to him to take away with many protestations of gratitude. And I trotted before him very cheerfully, delighted that I was saying farewell to packs and burdens, and that now I had gained my freedom I should be able to find some roses [to undo his transformation] at the start of spring in the flowering meadows. And it even struck me that if I had garnered such gratitude and so many honours while in the form of an ass, how many more rewards I might earn once I regained my human shape.

But as soon as the groom had led me away from the town, no pleasures awaited me, nor even my freedom. For straightaway the man's wife, a wicked and grasping woman, yoked me to the mill, beating me with a leafy branch, to make bread for her and her family at the expense of my hide. Nor was she satisfied with wearing me out to make her own food; she hired me out at the mill to grind her neighbours' corn. Even the food promised in reward for my labours was denied me, for she sold the barley I was to have eaten, ground in the very mill as I turned it, to the farmers round about, and at evening she set before me, after a day yoked to the weary mill, dirty, unsifted bran full of stones.

[Lucius is at length turned out with the horses, but the stallions attack him.]

Fortune, however, never tiring of my torments, devised a new plague for me. I was set to carrying wood down from the mountain, and a boy was set to drive me who was the worst-natured of all boys. Wearied by the steep slope of the high mountain, my hooves worn from striking them on sharp rocks, I was so harshly beaten with constant blows of his stick, even gong downhill, that the pain of the blows went right to my marrow. By constantly beating the same place on my right flank he wore through my hide and made a deep wound like a pit or a crater, and kept on striking at the same spot even when it was running with blood. He loaded so much wood upon me that it made a burden

fit for an elephant rather than an ass; even worse, when the load became unbalanced and began to slip to one side, instead of taking away some of the wood that was badly loaded and helping me by lightening the load a little, or at least transferring some of the burden to the other side to even it out, he would simply pile on stones to balance the weight. Nor was he content, after all my sufferings, to burden me so; whenever we crossed the stream which ran alongside the road, to save his boots from getting wet he would jump up onto my haunches, another small addition to so great a load. And if by some misfortune I slipped in the mud on the stream's bank and fell under my huge load, where a good driver would reach out a hand and pull on my halter, or lift me by the tail, or at least take off some of the load to allow me to regain my feet, this monster gave me no assistance in my weariness; but beginning with my head, or rather my ears, he belaboured the whole of my body with his heavy cudgel, until the blows themselves brought me to my feet, like a stinging poultice.

COMMENT: Apuleius' *Metamorphoses* or *Golden Ass*, the tale of Lucius who is transformed into a donkey, is part literary romance and part moral allegory. The choice of a donkey for Lucius' transformation is purposeful in a literary sense, as it allows him to be sold from owner to owner, set to different kinds of work and to be caught and claimed when he escapes, testimony once more to the usefulness of the donkey in the ancient world. As a donkey, Lucius' fortunes lurch to extremes of good and bad treatment, both exaggerated for effect. The favourable treatment which he receives, as at the start of this passage, dwells on his being fed luxurious, often human, food and given opportunities for sex, both of which draw on the stereotype of the donkey as a creature of uncontrolled appetites (Griffith 2006: 224); on the other hand, Lucius' many bad owners subject him to violence, petty cruelties and hard labour, the worst of which is notoriously found as a mill donkey (see WORKING ANIMALS no. 4). Although Lucius retains his human consciousness in his animal form, the novel does attempt to see the world from an ass's perspective, but does this mean that the story carried any message for its readers about how animals should be treated? The cruel boy in the extract above is eventually eaten by a bear, but there is no underlying concern for animals' experience: the transformed Lucius simply experiences the lot of the donkey, which is accepted as the way of the world. It is significant that as a donkey Lucius is continually shown trying to use his intelligence to avoid work and to look for food (e.g. IV.4, IX.11, X.13–14): some of the more cruel treatment of animals in antiquity does seem to have been the result of owners assuming human-style motivations in animals, i.e., that an animal's reluctance to work stemmed from laziness or cunning rather than inability or fear (see WORKING ANIMALS no. 3).

16. The noble mule

Plutarch On the Intelligence of Animals (Moralia 970a–b)

... just like the generosity of the ancient Athenians towards the mule. When Pericles was constructing the Hecatompedon on the Acropolis, as one would expect, stones were brought up every day by teams of draught mules. One of these animals, which had laboured enthusiastically, but had been retired due to age, would come down to the Kerameikos each day to meet the teams hauling the stones, and turn and go up alongside them, trotting with them as though to encourage them. As a result the people, impressed by its public-spiritedness, ordered that the mule be fed at public expense, like an athlete who has grown old.

COMMENT: The tale of the noble Athenian mule clearly had proverbial status in antiquity: Plutarch recounts the story twice, here and in his *Life of Cato* (5.3). It first appears in Aristotle (*HA* 577b 28–578a 1), though in a slightly less generous version – the mule performed the same public-spirited act, but the decree of the *demos* was only that the bakers should not drive it away from their trays, depicting it as foraging for food. One does not have to accept the story unquestioningly to appreciate the status of the mule in classical Greece: as Griffith (2006) has very effectively shown, mules were highly favoured animals, both for agricultural purposes and as sought-after carriage animals. Mule-carriages appear as the favoured mode of transport in Greek wedding scenes (Griffith 2006: fig. 12b) and Calder (2011: 51) makes the interesting suggestion that mules' calm temperament may have made them suitable for an occasion when the bridal carriage was showered with fruit or flowers. Mules also drew carriages for funerary processions: a mule named Phalios (Blaze) appears on a black-figure funerary pinax by Exekias (Berlin 1814; Boardman 1974: fig. 105.2), indicating that they were named in the same way as horses. In the sixth and fifth centuries mule-wagon racing was an event in the Olympic Games (Pausan. V.9), and the tyrant Anaxilas of Rhegium who won the event in the 480s minted silver tetradrachms depicting his victorious team (Kraay 1976: 214 and pl. 45). The story goes that the poet Simonides was invited to compose a victory ode for a winner in the mule-race, but refused on the grounds that mules were not sufficiently high-class for his poetry. When the proposed fee was increased, however, he remembered that mules were offspring of horses as well as of donkeys, and accepted the commission (Ar. *Rhet.* 1405b 24–28).

17. Mule-breeding

Varro *De re rustica* 2.8

I said, 'Well, I shall not allow you to leave until you have given me the "third act" of our discussion, dealing with mules, dogs and herdsmen.' 'My discussion of the first will be short,' replied Murrius, 'because mules and hinnies are hybrids and grafts, so to speak, not grown from their own stock. The mule is offspring of the mare and jackass, and the hinny of the stallion and jennet. Both are very useful creatures, though neither brings income from breeding. The newly-born ass's colt is put under a mare to fatten on her milk, since mare's milk is said to be better nourishment than ass's. The colts are fed besides on straw, hay and barley. The foster-mares are also treated with care, so that they can provide abundant milk for the foals. An ass colt raised in this way can be brought to the mare at three years, and being used to horses will not refuse to mate. If you breed them earlier than three years, the jack ages rapidly, and his foals are poorer in quality. Those who do not have a jack raised in this way and who want to breed mules should choose the largest and most handsome jack they can, of strong stock such as the Arcadian, recommended by our ancestors, or the Reatine which we now recommend, where breeding jacks can command three or four hundred thousand sesterces. When buying asses the same advice applies as in the case of horses, both for buying and receiving them.

Asses should be fed principally on hay and barley, and be well fed in preparation for breeding to improve their virility; they should be bred at the same season as horses, with a groom to help in the mating. When a mare bears a mule or a molly, they should be reared by the mother. If the foals are born in a damp or marshy place, they will have soft hooves, but if they are taken up to the mountains in the summer, as is done in Reate, their hooves will grow hard and strong. In building up a herd of mules one should pay attention to both age and confirmation, so that they are both strong enough for haulage

and good to look at; for pairs of mules pull all the carriages on our roads. You would consider me an expert in this field, being from Reate myself, if you didn't have your own herds of mares on your estate, and had not sold herds of mules yourself.

The hinny, the offspring of a stallion and a jennet, is smaller than the mule and redder in colour, with ears more like those of a horse and mane and tail like an ass. The pregnancy lasts for twelve months as with horses. Hinnies are fed and raised in the same way as foals, and their age can be determined from their teeth.

COMMENT: Varro's treatise shows that mule-breeding in Rome was big business, and Pliny mentions the profits which could be made from it (NHVIII.170). As mules are sterile, specialist breeding was necessary to meet demand and it was a much-studied science in antiquity. The technical aspects of breeding mares and donkey jacks are discussed in great detail by Columella (*De re rust.* 6.36–7). Because mules combine the steady temperament and sure-footedness of the ass with the size and strength of the horse they could pull or carry heavier loads than the former, more reliably than the latter. Mules were the principal draught animal of the Roman empire, for trade – the obedient pack-mules of Gaul were praised by the fourth-century poet Claudian (*Carm. Min.* 18) – for the army, and for the *cursus publicus*. Mule-drawn light carriages carried officials on state business, and a well-known sestertius struck under Nerva to commemorate the remittance of costs for the *cursus* in Italy illustrates two grazing mules with the yoke of the official carriage behind them (Toynbee 2013: 186, pl. 88). The welfare of the state's mules was of great importance, and public slaves with the title *mulomedici* were employed to tend them (Th. Code 8.5.31), a term which came to indicate all kinds of horse doctor (see HORSE no. 22).

18. Roman mule-carts

***Mosaic from the Baths of the Cisiarii, Ostia, second century CE
(photograph by kind permission of Dr Jos Janssen, Leiderdorp, NL)***



COMMENT: Built in the reign of Hadrian, the Baths of the Cisiarii at Ostia are named for the magnificent black and white mosaic in the *frigidarium* which depicts four groups of mules with their drivers, two groups in harness and drawing carts, one pair of mules being harnessed, and one pair drinking at a trough. The mosaic depicts the activities of the *cisiarii*, the mule-carriage drivers, and it is thought that the small bath complex was built by the *collegia* or guild (Meiggs 419). Inscriptions suggest that *collegia* of *cisiarii* existed in many towns including Praeneste, Ostia, Pompeii and Tibur, hiring out mule-carts and drivers from regular stations near the city gates

(CIL 14.409, 2874, 10.1064, 6.9485; Martin 2000: 199 and n.12). Just as in Greece, the mule-cart was a relatively high-status form of transport: as well as the official carriages of the *cursus publicus* (above), the ceremonial *carpentum* or covered carriage drawn by mules was a traditional privilege of Roman matrons and priestesses (Livy V.25.9), and it was later adopted by many empresses as a symbol of status (Toynbee 2013: 185–6 and fig. 89). In the mosaic four of the mules are named: the humorous and characterful meaning of the names (the two mules being harnessed are Pudes (Shy) and Podagrosus (Gouty), and the two drinking Potiscus (Thirsty) and Barosus (Softy)) attests to a personal relationship between the *cisiarii* and their animals.

Bibliography

- J.N. Adams, 'The generic use of mula and the status and employment of female mules in the Roman world', *Rh. Mus.* 136 (1993), 35–61.
- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
- J. Boardman, *Athenian Black Figure Vases: a handbook* (London 1974).
- J. Boessneck and A. von den Driesch, 'Animal bones', in F. Debono and B. Mortensen (eds), *El Omari: a Neolithic settlement and other sites in the vicinity of Wadi Hof, Helwan* (Mainz 1990), 99–101.
- H.K. Bond, *The Historical Jesus. A Guide for the Perplexed* (London 2012).
- C. Booth, 'The ancient Egyptians were human too', *Ancient Egypt* 14.6 (2014), 20–5.
- O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (Walnut Creek 1998).
- J. Bough, *Donkey* (London 2011).
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
- E. Chaline, *Fifty Animals that Changed the World* (Newton Abbot 2011).
- D.J.A. Clines, *Job 38–42* (Nashville 2012).
- J. Curtis and N. Tallis, *The Horse from Arabia to Royal Ascot* (London 2012).
- R. Drews, *Early Riders. The Beginnings of Mounted Warfare in Asia and Europe* (London 2004).
- F. Dunand and R. Lichtenberg, *Des animaux et des hommes. Une symbiose égyptienne* (Paris 2005).
- C. Eason, *Fabulous Creatures, Mythical Monsters, and Animal Power Symbols* (Westport 2008).
- C. Eyre, *The Use of Documents in Pharaonic Egypt* (Oxford 2013).
- Y. Feliks, *Nature and Man in the Bible. Chapters in Biblical Ecology* (London and Jerusalem 1981).
- I. Finkel, *The Ark Before Noah. Decoding the Story of the Flood* (London 2014).
- B.A. Foreman, *Animal Metaphors and the People of Israel in the Book of Jeremiah* (Göttingen 2011).
- B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 2005).
- I.S. Gilhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
- M. Griffith, 'Horsepower and donkeywork: equids and the ancient Greek imagination', *Classical Philology* 101 (2006), 185–246 and 307–58.
- H. Hoffmann, 'Rhyta and kantharoi in Greek ritual', *Greek Vases in the J. Paul Getty Museum* 4 (1989), 131–66.
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- P.F. Houlihan, *Wit and Humour in Ancient Egypt* (London 2001).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- J. Kamrin, 'The procession of "Asiatics" at Beni-Hasan', in J. Aruz, S.B. Graff and Y. Rakic (eds), *Cultures in Context. From Mesopotamia to the Mediterranean in the Second Millennium B.C.* (New York 2013), 156–69.
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- C.M. Kraay, *Archaic and Classical Greek Coins* (London 1976).
- J. Kugel, *How to Read the Bible: a guide to scripture, then and now* (New York 2008).
- W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960).
- S. Lewis, 'A lifetime together? Temporal perspectives on animal-human interactions', in T. Foegen and E.V. Thomas (eds), *Interactions Between Animals and Humans in Graeco-Roman Antiquity* (Berlin 2017).
- M. Lichtheim, *Ancient Egyptian Literature Volume III: the late period* (Berkeley 1973).
- J.M. Lindenberger, *The Aramaic Proverbs of Ahiqar* (Baltimore 1983).
- S.D. Martin, 'Transportation and law in the city of Rome', in S.K. Dickison and J.P. Hallett (eds), *Rome and her Monuments: essays on the city and literature of Rome in honor of Katherine A. Geffken* (Wauconda, IL 2000), 193–213.

- T.F. Mathews, *The Clash of Gods: a reinterpretation of early Christian art* (Princeton 1993).
 A.G. McDowell, *Village Life in Ancient Egypt. Laundry Lists and Love Songs* (Oxford 1999).
 A. McFarland and A.-L. Mourad (eds), *Behind the Scenes. Daily Life in Old Kingdom Egypt* (Oxford 2012).
 R. Meiggs, *Roman Ostia* (Oxford 1973).
 A. L. Oppenheim and L.F. Hartman, 'The domestic animals of ancient Mesopotamia according to the XIIIth tablet of the series HAR .ra = ḫubullū', *Journal of Near Eastern Studies* 4.3 (1945), 152–77.
 D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
 S.B. Parker (ed.), *Ugaritic Narrative Poetry* (Atlanta 1997).
 R. Parkinson, *The Painted Tomb Chapel of Nebamun* (London 2008).
 A. Pope, 'Ancient Persian art: animal sculpture in gold and electrum', *The Illustrated London News*, March 2 (1935).
 D.T. Potts, 'Equus asinus in highland Iran: evidence old and new', in N.J. Conard, P. Drechsler and A. Morales (eds), *Between Sand and Sea: the archaeology and human ecology of southwestern Asia. Festschrift in Honor of Hans-Peter Uerpmann* (Tübingen 2011), 167–75.
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 H. Vanstiphout, *Epics of Samarian Kings* (Atlanta 2003).
 P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
 P.G. Walsh, *Apuleius: The Golden Ass* (Oxford 1994).
 K.C. Way, *Donkeys in the Biblical World* (Winona Lake 2011).
 A.N. Wilson, *Jesus* (London 1992).
 F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

CAMEL

The early history of the camel has major gaps, although there is ample evidence for early domestication of the one-humped Arabian camel (often called the dromedary, a term which strictly speaking refers to the fast riding breed of camel); it is typical of the deserts of the Middle East and frequently enters into biblical narratives (it is mentioned fifty-seven times in the Hebrew bible and six times in the New Testament, including Jesus' famous use of the image of the camel passing through the eye of a needle (Mark 10.25, Matthew 19.24)). The two-humped Bactrian camel, originally from the Oxus area in south-west Asia where winters are cold, was brought further south where it was encountered by Iranian and Mesopotamian peoples (see Brentjes 1960 for an overview).

There are surprisingly few references to camels in the literary and material culture of Egypt; although archaeology attests to their domestication there in the early dynastic period, there are long periods when the camel seems to have been unknown in Egypt. In contrast, among peoples of the Levant, Mesopotamia (especially the Assyrians) and Iran they functioned as expressions of wealth and status, even among kings: David appointed the Ishmelite Obil as overseer of the royal camels (1 Chronicles 27.30) and the Queen of Sheba's baggage was carried on camels (1 Kings 10.12). Camels were widely used by the Hebrews and Arabs as draught animals and for transportation but while they were a rich source of food amongst the Arabs, they were not eaten by the Jews because they were considered unclean (Deuteronomy 14.7).

Camels are attested often enough in Achaemenid (and related) sources to prove their worth to the Persians (see further Bulliet 1975; Irwin 2010). In fact, the Old Persian word for camel, *uša* or *uštra*, often occurs as a component in personal names (most markedly Zarathuštra, 'he who manages camels'). Images of Bactrian camels are unmistakable and copious, for they are included in the representations of several delegations from north-eastern Iran at Persepolis (see below), whereas single-humped dromedaries are depicted only with the Arab delegation. Dromedary camels were important sources of meat, milk and hair, and while they were used as pack animals

(Hdt. I. 80) they were not engaged in heavy hauling. In fact, none of the Persepolis camels are portrayed as draught animals, but post-Achaemenid period sources give explicit references to camel-drawn carts (Strabo *Geog.* XV. 1.43), and one Achaemenid seal-image shows the Great King in a chariot pulled by a team of dromedaries (see Rehm 2006: 135). Both species of camels were used by the Persian cavalry, and Darius I certainly employed camel troops (*ušabari*) in his campaign against the rebellious Babylonians (Bisitun Inscription col. 1 §18; see Sekunda and Chew 1992: 51); Greek artists sometimes depict the Great King riding a camel (Sánchez 2009: 314). One small seal illustrates the Great King spearing a lion while seated on a dromedary, suggesting that camels could be used in the hunt too (Collon 1987: 156–7, fig. 700). Occasionally a much-beloved camel is attested in the sources, like the lucky one stabled at Gaugamela by Darius I (below no. 5).

Camels, despite their ubiquity in the East, remained exotic animals in both Greece and Rome. Bactrian camels were known to the Greeks from the earliest times, through the Greek cities on the Asia Minor coast and trading links with cultures such as Lydia. Herodotus, writing c. 450 BCE, expected his audience to be sufficiently familiar with the camel as to need no description of it, unlike the crocodile or hippopotamus (III.103). The Persian invasion force under Xerxes in 480 had included camels as part of the baggage train (Hdt. VII.83), and a century later the Spartan king Agesilaus is said to have brought some camels captured during his campaign in Asia back to Greece (Xen. *Hell.* III.4.2), but while Greek writers appreciated their speed and strength, they were never introduced into Greece. Only under Alexander the Great and the Successor kings did camels become a regular part of warfare and transport, as the Greeks adapted to the ways of the countries they had conquered. Alexander, for instance, when he feared a conspiracy, sent men mounted on camels for speed to kill his general Parmenion (Diodorus XVII.80.3), and Antiochus III's army in 189 BCE included a force of archers mounted on dromedaries (Livy XXXVII.40).

At Rome the camel was little known until the first century BCE; it was not until the Roman conquest of the East that they entered the public consciousness. A dromedary appears on a denarius of 58 BCE as an attribute of the conquered Nabatean king Aretas III (Crawford 1974: no. 442), and later it came to symbolise the province of Arabia on coins (Toynbee 2013: 137). Soon after this, camels began to be adopted by the Roman army for transport in the East, and under Roman rule they became particularly widespread in North Africa. By the time that Pliny the Elder wrote his *Natural History* their characteristics of travelling for many days without water and their poor temperament were well known (NH VIII.67–8), as well as the use of their internal organs in medicine (NH XXVIII.91). They seem to have featured only infrequently in the arena at Rome, and remained a symbol of the exotic; in Christian times their association with the Magi kept them in the artistic tradition.

1. Camel and rider

*Line drawing after a limestone carving from Tell Halaf, Syria,
1000–900 BCE (Baltimore, Walters Art Museum 2006)*



COMMENT: This image represents an Arabic caravan trader. From the beginning of the first millennium BCE the domestication of dromedaries made the caravan trade (especially in spices and incense) possible and the Guzana image may be the earliest representation of such a dromedary rider.

The relief was excavated in northern Syria at the site of Tell Halaf, the capital of a small independent city-state known as Guzana to the Assyrians, who conquered it in the late ninth century BCE. While the human images have been depicted in the less sophisticated local style, many of the animal reliefs may have been modelled on finely carved ivories imported from northern Syria and Phoenicia which were found at the site. In this relief a rider perches on the top of the hump of a dromedary camel, urging it on with a rod. Crossed bands securely fasten the saddle onto the animal; this is the so-called South Arabian saddle, and its invention meant that goods could be hung and balanced over both sides of the hump, enabling the camel to carry a greater capacity in comfort and with stability. Not surprisingly, this saddle-style spread far and wide throughout the Near East (see Bulliet 1975: 80–6). The curving neck, rounded body and unevenly placed hooves of the camel capture its swaying motion perfectly.

2. Assyrian campaign against the Arabs and the devaluation of camel-price

Akkadian text of Ashurbanipal (after Pritchard 1969: 299. ix)

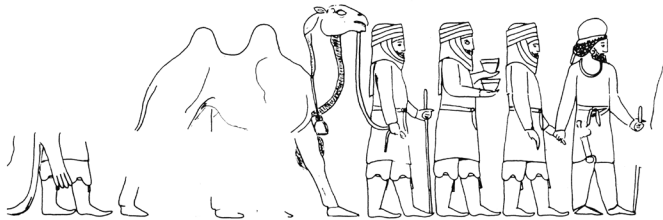
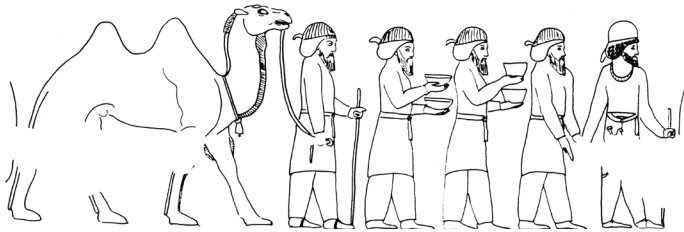
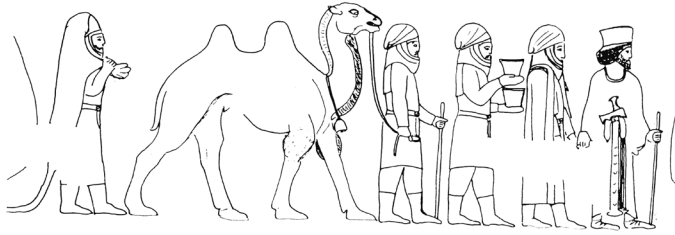
Those fugitives who escaped my onslaught occupied in their terror the mountain (called) Hukkuruna (which is) a steep mountain peak. I ordered soldiers to stand on guard . . . anywhere where there were cisterns or water in the springs, thus refusing them (access to the) water (supply) which (alone) could keep them alive. I (thus) made water to be very rare for their lips, (and many) perished of parching thirst. The others slit open camels, their (only) means of transportation, drinking blood and filthy water against their thirst. None of those who ascended the mountain . . . did escape; none was fleet of foot to get out of my hands. I caught them all myself in their hiding places; countless people, male and female, donkeys, camels, large and small cattle, I led as booty to Assyria . . . I formed flocks and distributed camels as if they be sheep, dividing (them) up to all inhabitants of Assyria. Camels were bought within my country for less than one shekel of silver on the market place. The female tavern-keeper received camels, even slaves as a gift, the brewer for a [jug-]full of beer, the gardener for a basket of fresh dates . . . Famine broke out among them (i.e., the Arabs) and they ate the flesh of their children against their hunger . . . Even when the camel foals, the donkey foals, calves, and lambs were suckling many times on the mother animals, they could not fill their stomachs with milk.

COMMENT: The ancient Arabs valued camels as much as Israelites, Babylonians and Assyrians valued goats and sheep; camels provided transportation for people and goods (especially frankincense and myrrh), milk and meat, clothing and even accommodation (camel hair was used to weave strong textiles for creating tents). Camel dung was burned for fuel. Tombstones from Yemen frequently depict camels and these animals were important aspects of indigenous funerary art (Bulliet 1975: 97 fig. 42). The camel was clearly at the epicentre of life and culture in ancient Arabia, and the text of Ashurbanipal's three campaigns against the Arabs (652–45 BCE) show how completely the Assyrians attempted to devastate Arab society by action against their camels. Cuneiform inscriptions outlining the narrative events of the wars are accompanied by vivid scenes carved in high relief which show Arab camel-cavalry valiantly fending off the Assyrian horse-led attack, but to little avail (Bulliet 1975: 83 fig. 34). Ashurbanipal relates how he slaughtered many desert tribes and ambushed others and drove them to starvation so that they had no choice but to slaughter and feed on the flesh and blood of their camels. As a demonstration of his victory over the Arabs, the king relates how he flooded the Assyrian market with cheap Arabian camels so that their value became almost negligible.

Perhaps less well known is the fact that camels could also be victims of the hunt. An inscription engraved on a cliff-face at Uqla in Arabia notes that 'Yad'il Bayyin, king of Hadramawt. . . [and his party] killed thirty-five bovines and eighty two young camels and twenty five gazelles and eight cheetahs at the fortress "Anwadum"' (Pritchard 1969: 21).

3. Bactrian camels

a) East staircase of the Apadana at Persepolis, Iran, c. 500–480 BCE



b) Red-figure lekythos, c. 400 BCE (London, British Museum 1882,0704.1; after Llewellyn-Jones 2016)



COMMENT: Bactrian camels were domesticated on the high steppes of Inner Asia during the third millennium BCE, and they were distributed widely across the civilisations of Asia and China. At Persepolis Bactrian camels are, appropriately, part of the tribute brought by the Bactrian delegation to the Great King (Parthians, Arachosians and Areans also bring gifts of these two-humped camels). The Persepolis artist depicts the animals in loving detail; their facial expressions are particularly fine. The camels are led by a nose-ring and wear harnesses and bells around their necks (cf. Hebrew bible, Judges 8. 20–1). Camels were used by the Persians for transportation and Curtius Rufus (III.3. 26) records that 300 camels carried the king's treasury, with a guard of archers in attendance; the Bactrian breed was particularly good at transporting heavy loads.

It is possible that the Greeks first came into contact with Bactrian camels in Asia Minor, thanks to Achaemenid expansion. In fact Herodotus maintains that camels carried provisions for Xerxes' army, and notes how the camel train was attacked by lions even though the lions, 'had never seen that beast before, nor had any experience of it' (7.125). But we do not know for certain if Xerxes' camels were in fact Bactrians or were dromedaries, like those used by Cyrus in his Lydian campaign (Herodotus 1.80). Bactrian camels do appear on seals and gem-stones from Achaemenid Anatolia seals of late fifth and early fourth century BCE (Boardman and Vollenweider 1978: 114, no. 117).

The image on the so-called 'Camel *lekythos*' is full of movement, life and detail and easily captures the Greek fixation with Persian court-nomadism, although, as is always the case, many specifics are misread (Llewellyn-Jones 2016). In the centre of the scene a well-drawn Bactrian camel is guided forward with a halter by a Persian who points forward, as if to the path ahead. He looks upward towards the rider, the Great King himself, who is sitting in a kind of *howdah* decorated with richly woven cloths and with a projecting foot-rest. He cuts a dashing figure; his body is depicted front-on and his legs, resplendent in zig-zag-pattern trousers, are splayed apart as he balances nonchalantly between the camel's humps, a short whip in one hand – used to spur the beast forward no doubt – while his right arm is outstretched to afford some balance as the camel lurches along.

In Assyria the annals of Assur-bel-kala (1074–57 BCE) maintained that the king sent merchants to acquire female Bactrian camels (Heimpel 1980: 331) and Shalmaneser III (858–24 BCE) says that he brought back seven Bactrian camels as part of the booty from a campaign against Gilzanu – they were later depicted on the so-called black obelisk of Shalmaneser ('double are their backs' are the words used to describe them) and on the Balawat gates (Kuhrt 1999). A debt-note from the reign of Esarhaddon, dating to 674 BCE, shows an Assyrian official named

Dannaya putting two Bactrian camels at the disposal of three individuals, possibly for breeding purposes (Kwasman & Parpola 1991: no. 241):

Two double-humped camels belonging to Dannaya, at the disposal of Yahutu, Ilukenu[usur], and Adad-aplu[ddina]. They shall give the camels back on the first of [Marchesvan]. If they do not give them, they shall pay 6 minas of silver. Month Tishri, 14th day, eponym year of Sarru-nuri. Witness Siqu-Issar. Witness Sulmu-sarri. Witness Adad-dan. [I]f they do not pay the silver, it will increase by 2 shekels per mina.

Potts (2005: 51–2) has persuasively argued that in Mesopotamia Bactrian camels were first and foremost acquired for hybrid breeding with dromedaries:

It can at least be suggested, therefore, that the reason why Assyrian kings seized Bactrian camels and demanded them as tribute from Iranian lands to the east of Assyria was to acquire studs and breeding females in order to practice the same sort of hybridization as just outlined, with a view to developing stronger pack animals for a variety of purposes (military, commercial, agricultural). While we have as yet no archaeological evidence of camel hybridization from the Assyrian period, we do have some from later periods in the Near East, which demonstrates that hybridization was practiced in antiquity . . . The *raison d'être* behind the Assyrian interest in the Bactrian camel, and behind its later occurrence as far west as Anatolia, lies in the breeding of Bactrian-dromedary hybrids, the strength of which was unsurpassed by any other domestic animal, apart from the elephant, in the ancient Near East.

4. Persian royal camels

Elamite cuneiform tablets from Persepolis, Iran, c. 510–480 BCE (after Hallock 1969)

PF 1787

9.9 BAR of flour, supplied by Karma, Bawukšamira received, (for) rations of 33 camels belonging to the king. He carried a sealed document of Parnaka. He went forth to the king at Susa. First month, 22nd year.

PF 1786

9.9 BAR of flour Bawukšamira received (for) rations for camels [belonging to the king]. Coming from Susa, he carried an authorization of Bakabana. He went to Persepolis. 33 [royal?] camels consumed 3 QA. Second month, 22nd year.

COMMENT: These economic documents known as the Persepolis Fortification Tablets (PF) were written in Elamite cuneiform and were stored in the imperial bureau at Persepolis. All the texts date to the reign of Darius I and detail the movement of foodstuffs and livestock around the heart of the Persian empire. They are the single most important source for understanding the internal workings of the Persian Achaemenid empire as well as a rich source of knowledge about the fauna of ancient Iran. In these two related texts large herds of camels belonging to the king are attested being driven back and forth between the royal residences at Persepolis and Susa. The texts list the amount of food rations (in BAR of flour) given as part-payment to the camel-driver, a man named Bawukšamira who is responsible for moving and feeding the Great King's personal

herd of 33 camels across southern Iran. Achaemenid monarchs enjoyed a peripatetic lifestyle and it seems that wherever the king went, his camels were certain to follow. Feasibly, these camels provided the royal table with milk, but they were more an expression of the monarch's personal wealth and status (see Briant 2002: 464 for a discussion of the nuances of this text). It is possible that the king's own camels were used in hunting expeditions and in pulling the royal chariot.

5. In honour of the Great King's camel

Strabo Geography XVI.1.3

Darius [I], son of Hystaspes named [the area of Gaugamela so] because he gave it as an estate (Gr. *oikos*) for the maintenance of the camel which had helped him the most when he journeyed across the Scythian desert with a load which contained the king's essential supplies.

COMMENT: Strabo notes that Darius I honoured the memory of a camel that had aided his journey across the Scythian desert by stabling it in a place which he subsequently named 'Gaugamela', lit. 'Camel's House'. The etymology is unlikely, as is the idea that an entire estate was maintained for the upkeep of one camel, even a king's favourite. It is probable that the estate's revenues were used for the maintenance of the royal camel brigade, the *uṣabari*.

6. Watering camels at a well

Hebrew bible, Genesis 24.10–21

Then the servant took ten of his master's camels and departed with all kinds of gifts from his master at his disposal. He journeyed to the region of Aram Naharaim and the city of Nahor. He made the camels kneel down by the well outside the city. It was evening, the time when the women would go out to draw water. He prayed, 'O Lord, God of my master Abraham, guide me today. Be faithful to my master Abraham. Here I am, standing by the spring, and the daughters of the people who live in the town are coming out to draw water. I will say to a young woman, "Please lower your jar so I may drink." May the one you have chosen for your servant Isaac reply, "Drink, and I'll give your camels water too." In this way I will know that you have been faithful to my master.'

Before he had finished praying, there came Rebekah with her water jug on her shoulder . . . She went down to the spring, filled her jug, and came back up. Abraham's servant ran to meet her and said, 'Please give me a sip of water from your jug.' 'Drink, my lord,' she replied, and quickly lowering her jug to her hands, she gave him a drink. When she had done so, she said, 'I'll draw water for your camels too, until they have drunk as much as they want.' She quickly emptied her jug into the watering trough and ran back to the well to draw more water until she had drawn enough for all his camels. Silently the man watched her with interest to determine if the Lord had made his journey successful or not.

COMMENT: Acting as a 'novella' within the book of Genesis, the story of Isaac's wooing of Rebekah takes its time in building up an atmospheric story. In this section a servant from the household of Abraham is sent to check if Rebekah has the qualities looked for in a bride. That she tends to the needs of the camels so assiduously immediately qualifies her as a fitting wife for Isaac and a member of Abraham's tribe.

The text is knowledgeable about the practice of camel-care, but in all probability it was written many centuries after the patriarchal period of Hebrew history and probably dates to the Babylonian exile era, when camels were widely used throughout the Near East.

7. Camels behaving badly

Hebrew bible, Jeremiah 2.23

You are like a flighty young she-dromedary
that rushes here and there, crisscrossing its own path.

COMMENT: This comical little vignette is actually used by the prophet Jeremiah to criticise the people of Israel. As they stray further away from the orthodox ways of Yahweh, so the prophet likens them to harlots who lust after men and then to female camels who in their keenness to mate with the males of the species know no restraints on their behaviour. As is common with the Hebrew bible, we learn much about animal behaviour from seemingly throw-away allusions, metaphors and similes, although it has been noted that given its socio-cultural importance to the ancient Hebrews, the comparative lack of camel metaphors in the bible is striking (Foreman 2011: 149).

8. Bactrian camel with its handler

*Boiotian black-figure skyphos, Munich, Staatliche
Antikensammlungen und Glyptothek 2008, from Greece, attr.
Camel Painter, c. 550 BCE. Photograph by Christa Koppermann*



COMMENT: This cup was made in Boiotia around 550 BCE; it depicts on each side a youth leading a camel on a halter as two other youths look on. The camel is a Bactrian, and is depicted with considerable accuracy: the shape of the head, confirmation of the humps and the method

of leading on a nose-ring all indicate the painter's familiarity with the animal. Only the lower legs are shown mistakenly, with horse-like feet and hooves. While the camel is not a common subject on Greek pottery – we have just eight examples over a span of 200 years – the images which do exist indicate that the use of Bactrian camels as beasts of burden in the Near East was well known, even if the animal itself is not usually very well drawn. We have occasional records of camels in Greece in classical times, as noted above, but the striking feature of this depiction is its early date. There are indications that pot painters in Athens were often slaves, with origins outside Greece; a contemporary of this artist gives his name as Lydos, 'the Lydian', and if some slave painters were of Eastern origin it would explain the knowledge of the camel shown here.

9. Greek description of the camel

Aristotle Historia Animalium 499a 13–30

Camels are unique among four-footed creatures in having what it called a 'hump' on their backs. Bactrian camels differ from the Arabian type, in that the former have two humps, and the latter only one. But the Arabians have a similar hump underneath their bodies, on which they take their whole weight whenever they kneel down. The female camel has four teats, like a cow, and the tail is like that of a sheep. The camel's genitals point backwards. And it has only one knee in each leg, and no more joints than that, as people claim, although it appears so because of the contraction of its abdomen. It has a knuckle-bone like an ox, but one that is weak and small for its size. It is cloven-footed and has no incisor teeth; its feet are cloven in the following way. The hind feet are divided a little way, up to the second joint of the toes, while on the forefeet there is a bigger division, up to the first joint of the toes . . . And there is something across the middle of the cleft, as on the feet of geese. The camel's feet are fleshy underneath, like bears' feet, and because of this, camels which go to war are given leather shoes (*karbatinai*) whenever they become footsore.

COMMENT: Aristotle's *Historia Animalium*, written in the 340s BCE, is a collection of investigative notes on animals which he later used to compose treatises such as *On the Movement of Animals* and *Generation of Animals*. His discussion of camels shows that the distinction between Bactrians and dromedaries was well known, but that the claim first made by Herodotus (III.103) that camels have four knees in their hind legs was widely established in his time. While keen to establish the truth, Aristotle admits that one might easily be misled by the appearance of their joints. His statement that the dromedary has a second hump underneath its body is an example of the Greek desire for tidy classification: both species of camel can thus have two humps, just differently disposed.

The description of the shoeing of camels is fascinating; metal shoes for horses were unknown in Greece, so this must be the fruit of observation of camel management in the Persian army. Elsewhere, Aristotle comments on the camel's many stomachs and its impressive strength and size (*PA* 663a 1, 674a 30); less scientific writers such as Aelian added anecdotal material to their accounts, commenting on camels' supposed fear of horses, and their longevity (*NA* III.7, IV.55).

10. The emperor Justinian disbands the camel supply service

Procopius Secret History XXX.15–16

For a long time the state had maintained a large number of camels, which followed the Roman army when it went into battle, carrying supplies. As a result the farmers were not forced to act as porters for the army, nor did the soldiers go short of anything that they needed. But Justinian disbanded almost all of these camels, and consequently when the Roman army is now on campaign nothing of what is needed can be done.

COMMENT: Procopius' brief history dates to the sixth century CE, and is an odd and very hostile account of the reign of Justinian and his empress Theodora. Justinian is said to have damaged the state in numerous ways, including the dismantling of the public post system and the spy corps, and Procopius' claims are unlikely to be true. But what is interesting about this passage is its indication that camels had been present as an official part of the Roman army for several hundred years. They were first brought into service as supply animals on campaign in Asia in the first century CE under the general Corbulo (Tac. *Ann.* XV.12.2), and occasional references show their continued use in the eastern Roman empire until the third century (Toynbee 2013: 139). Despite the traditional use of camels in warfare by Persian and Hellenistic rulers, the Romans seem to have used them almost exclusively for transport: as well as their suitability to desert conditions and their endurance, camels are able to carry twice as much as mules and considerably more than horses, meaning that they were preferred whenever possible. Remains of camels have been found on military sites as far west in the empire as Switzerland, indicating that the army sought to use them in any suitable terrain (Coulston 2001: 112). A single camel carrying a load appears among the baggage train on the fourth-century Arch of Constantine, as the emperor sets out from Milan.

11. The camel distressed by incest

Aelian On the Nature of Animals III.47

For nature gives even animals which are without intelligence the ability to recognise incestuous intercourse simply by instinct, without any need of tokens of identity or the shepherd who exposed the baby Oedipus on Cithaeron. The camel, for example, will not mate with its mother. There was once a camel-herder who took a female camel and covered her up so that only her limbs were exposed, and brought her son up to mate her. The male camel, unsuspecting and eager to mate, did as required, and then realised what had happened. And it set upon the herder who had caused this unlawful mating, biting and trampling him, and by kneeling on him caused him a most painful death; the camel then threw itself from a precipice.

COMMENT: This unlikely tale forms part of Aelian's compendium of stories and descriptions of animals intended to demonstrate the variety and interest of the animal kingdom. In this case the innate virtue of the camel is emphasised: without the deceit of its handler, it would never have committed an act of incest, and it is credited with both a very human sense of shame, and clear will and purpose in its attack on the man and subsequent suicide. The idea that animals would avoid incest at all costs is of course unfounded – interbreeding of bloodlines was standard in ancient animal husbandry – but Aelian assumes that a camel could both recognise its relations and abide by culturally determined standards of behaviour. The story is an expression of the

ancient idea of ‘theriophily’, moral admiration for animals (Gill 1969): there was a longstanding tradition in both Greece and Rome that animals, because of their simplicity and freedom from human vices such as gluttony and envy, must be morally superior to humans, who constantly invented new vices in which to indulge, or who struggled to reach ideals of goodness and virtue. Such philosophical speculations rarely translated into better treatment for animals, but it gave rise to many beliefs about animals’ rejection of vice.

Bibliography

- J. Boardman and M.-L. Vollenweider, *Catalogue of the Engraved Gems and Finger Rings (Ashmolean Museum, Oxford) I. Greek and Etruscan* (Oxford 1978).
- B. Brentjes, ‘Das Kamel im Alten Orient’, *Klio* 38 (1960), 23–52.
- P. Briant, *From Cyrus to Alexander. A History of the Persian Empire* (Winona Lake 2002).
- R. W. Bulliet, *The Camel and the Wheel* (Cambridge, MA 1975).
- D. Collon, *First Impressions. Cylinder Seals in the Ancient Near East* (London 1987).
- J. Coulston, ‘Transport and travel on the Column of Trajan’, in C. Adams and R. Laurence (eds), *Travel and Geography in the Roman World* (London 2001), 106–37.
- M. H. Crawford, *Roman Republican Coinage* (Cambridge 1974).
- B. A. Foreman, *Animal Metaphors and the People of Israel in the Book of Jeremiah* (Göttingen 2011).
- J. E. Gill, ‘Theriophily in antiquity: a supplementary account’, *Journal of the History of Ideas* 30 (1969), 401–12.
- J. de Grossi Mazzorin, ‘Cammeli nell’ antichità: le presenze in Italia’, *Archaeozoological Studies in Honour of A. Riedel* (Bolzano 2006), 231–42.
- R. T. Hallock, *Persepolis Fortification Tablets* (Chicago 1969).
- W. Heimpel, ‘Kamel’, *Reallexikon der Assyriologie* 5 (1980), 330–2.
- R. Irwin, *Camel* (London 2010).
- A. Kuhrt, ‘The exploitation of the camel in the Neo-Assyrian empire’, in A. Leahy and J. Tait (eds), *Studies in Ancient Egypt in Honour of H. S. Smith* (London 1999), 179–84.
- T. Kwasman and S. Parpola, *Legal Transactions of the Royal Court of Nineveh, Part 1. Tiglath-Pileser III through Esarhaddon. State Archives of Assyria* 6 (Helsinki 1991).
- L. Llewellyn-Jones, ‘An orgy of Oriental dissipation? Some thoughts on the “Camel lekythos”’, *DABIR* 1.2 (2016), 31–8.
- M. MacKinnon, ‘Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data’, *Museion* 6.2 (2006), 137–61.
- D. Potts, ‘Bactrian camels and Bactrian dromedary hybrids’, *Silk Road* 3.1 (2005), 49–57.
- J. B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton 1969).
- E. Rehm (ed.), *Pracht und Prunk der Großkönige – Das persische Weltreich* (Stuttgart 2006).
- M. G. Sánchez, *El Gran Rey de Persia: Formas de Representación de la Alteridad Persa en el Imaginario Griego* (Barcelona 2009).
- N. V. Sekunda and S. Chew, *The Persian Army* (Oxford 1992).
- J. M. C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).

DOG

The dog (Hebrew *kelb*, Akkadian *kalbu*, Egyptian *tjesm*, Greek *kuôn*, Latin *canis*) was probably the earliest animal to be domesticated by humans, perhaps by 10,000 BCE or even earlier. The ancestors of Near Eastern and Egyptian dogs were domesticated from semi-tamed wolves and in Egypt the earliest skeletal remains for this type of dog can be dated to around 4500 BCE but in Mesopotamia the first evidence for the presence of dogs comes in the form of skeletons found in the graves at Eridu in the south of Iraq, dating to around 5000 BCE. They have mainly been identified as ‘pariah’-types. Development of different ‘types’ (‘breeds’ as such were a later phenomenon) went on continuously in the Near East, with certain forms (*tjesm*, *saluki*, *masfiſſ*) becoming

favoured as, variously, hunting dogs, guard dogs and sheepdogs. Akkadian texts do refer to 'native dogs', 'Elamite dogs', 'Persian dogs' and 'dogs from Meluhha', suggesting variations in breeds, but precise identification is impossible.

Most dogs, however, were semi-wild and in a Near Eastern context, both literal and figurative, the dog was held to be contemptible, whether as a filthy scavenger, a flesh-eater or, worst of all, a harbinger of disease. Not surprisingly, the word 'dog' was often used as a term of abuse (in Deuteronomy 23.18 the Hebrew word for 'dog' is used as a technical term, perhaps a euphemism, for a male temple prostitute; see also Revelations 22.15). In Egypt the dog was more highly esteemed, possibly because of the Egyptian veneration of canine deities such as Anubis and Wepwawet. The Egyptians valued dogs highly as household pets and as symbols of social elitism (see PETS).

The Greeks and Romans, in contrast to their Near Eastern neighbours, valued dogs very highly; long domesticated by classical times, dogs played a very important part in ancient Mediterranean life, and the quality of Greek and Roman writing about dogs is much more engaged and enthusiastic. In addition to scientific writers' descriptions of dogs, a distinct genre of literature focused on hounds and hunting, with surviving treatises by Xenophon, Arrian, Grattius and Oppian, and we also have a significant number of Hellenistic and Roman funerary inscriptions for individual named dogs (see PETS no. 2). Three basic types of dog were known in classical antiquity: the Molossian, a heavy mastiff type used as a guard dog or for hunting large animals, the Laconian, a swift greyhound type for hunting deer and hare, and small dogs such as the Melitaeen which were kept as pets (Kitchell 2014: 52–3; Busuttill 1969). The Romans in particular sought out new types of dog from across their empire, such as the Irish wolfhound and the Celtic sight-hound, for their different capabilities (Merlen 1971: 47–53). At the top of the canine hierarchy were the expensive hunting dogs kept by the elite, often imported, and the toy dogs which were pampered pets; below these were house and guard dogs, then working dogs, and below these large numbers of wandering dogs, shading into feral scavengers.

While it is clear that pariah dogs existed in every community, eating refuse (including corpses), the Greeks and Romans did not allow this activity to dictate their attitudes towards dogs as in other cultures; even the introduction of Christianity, which adopted traditional Jewish ideas about dogs as unclean, failed to alter these societies' affection for the dog. Dogs' intelligence and fidelity are praised from the very earliest sources: owners of hunting and toy dogs lavished praise and affection on them, and elements of affection permeate even attitudes towards guard and herding dogs. Dogs also provided a rich source of imagery to classical authors, and while some comparisons are negative (the dog as shameless, thieving or mad), most dwell on its pre-eminent quality of devotion to master and household.

1. *Tjesm*: the favoured dogs of an Egyptian nobleman
Relief from the tomb of Ptahhotep, V Dynasty, Giza



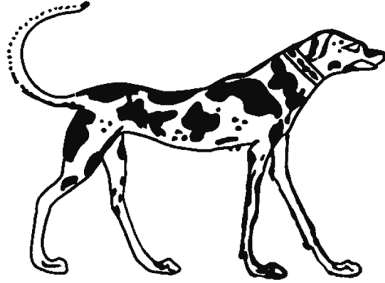
COMMENT: Ptahhotep was a city administrator and vizier to King Djedkare-Isesi of the V Dynasty. His fine mastaba tomb is located in the northern quarter of Saqqara and is justly famous for its exquisite wall paintings. This busy scene shows something of the sophisticated, civilised and elegant lifestyle of the nobility at the height of the Old Kingdom. Here Ptahhotep, one of the foremost men of his day, sits in state surrounded by the trappings of his success. He is attended by retainers and even a small orchestra of musicians and singers. Beneath his elegant feline-legged stool are four of his prized pets – a tamed monkey and three dogs. All the animals are leashed and are in the charge of an overseer of domestic animals.

The breed of dog represented here, one of two types of sight-hound (named for their proclivity to hunt by sight and not smell) which are commonly found in Egyptian art, is the so-called *tjesm* (a generic ancient Egyptian word for ‘dog’ in fact, but one retained by Egyptologists to refer to this distinctive form of hound). The *tjesm* was found over the whole of north Africa in antiquity but whether they were also imported into Egypt from the south (Nubia and Punt) remains speculation (Rice 2006: 33; Brewer 2002: 449–51). The *tjesm*, which can certainly be dated in Egypt as far back as 3750 BCE (skeletal remains from Abydos help confirm this), resembles a modern greyhound or basenji (which is indeed possibly descended from the *tjesm*) with its long narrow muzzle, straight profile, slender body with a deep chest and narrow waist, short coat, extended neck and long delicate limbs. It had a characteristically curly tail and upright ears and its short-haired coat was a golden-tan colour (like that of the modern basenji). Sometimes *tjesm* had had their ears clipped so that they appeared to be lop-eared (Brewer, Clark and Phillips 2001: 34), but their short curly tails remained a hallmark of the breed. Thus, Hilzheimer (1932: 418) suggests that, ‘According to Egyptian ideals this curly tail must certainly have formed a sign of good breeding, for it is always carefully represented in all works of art.’

The *tjesm* was the nobleman’s pet *par excellence*, and if it resembled the modern-day basenji in temperament, then the *tjesm* was alert, affectionate, energetic, curious, frisky, tireless and, above all, swift (Rice 2006). The *tjesm* were skilled hunting dogs and the hound is often shown in a variety of activities on the hunting field (see SPORT nos 9 and 11).

2. A *saluki* hound

Blue faience tile from the palace of Amenhotep III at Malkata, west Thebes, XVIII Dynasty (after Janssen and Janssen 1989: cover)



COMMENT: Pictured with increasing regularity during the New Kingdom, the *saluki* may have had its origins in Nubia and its presence in Egypt from the early XVIII Dynasty might have been a result of Egyptian imperial expansion south; the breed is sometimes shown in scenes of Nubian tribute processions. Like the *tjesm*, the *saluki* was a sight-hound, and was well suited for the hunt. It was tall (like the modern pharaoh-hound) but had a shorter, heavier muzzle than the *tjesm* and was lop-eared (although sometimes the ears were cocked) and dagger-tailed. The *saluki*'s short coat came in numerous colours ranging from black and tan to cream or white; the *saluki* shown here has striking piebald markings. They are depicted in many hunting scenes (e.g. SPORT no. 15) where they are shown to be graceful, swift and powerful predators (Arnold 1995: 57, no. 75), capable of bringing down large aggressive prey like hyenas and even ostriches. The *saluki* were the dogs owned and bred by royalty and the elite, and this hound, wearing a collar, was probably no exception.

3. Egyptian-style corgis?

Wall relief from the tomb of Khnumhotep, XII Dynasty (Brewer, Clark and Phillips 2001: 36)

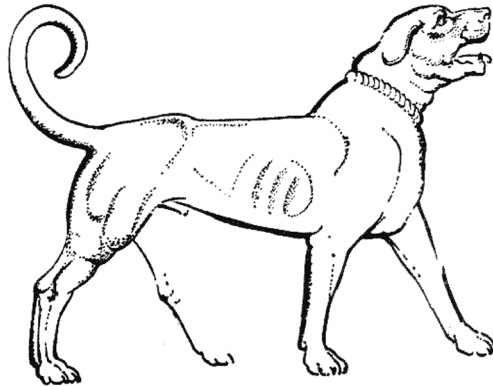


COMMENT: Besides the elegant sight-hounds employed for hunting, a variety of other dog 'breeds' appear in Egyptian art from the beginning of the Middle Kingdom onwards. These dogs are defined by their short limbs, long muzzles, pointed ears and curled, cocked or long tails. Having the appearance (with the exception of the tail) of the modern Welsh corgi or even the dachshund, these short-coated dogs came in a variety of colours and pelt patterns: a short-limbed dog depicted in the tomb of Tehuihotep (XII Dynasty), for instance, is piebald. Brewer (2002: 450) classifies them as the 'ubiquitous mutt' which might be represented by a short or tall form (as is the case in the Khnumhotep relief) and it is highly likely that the interbreeding of dogs occurred regularly, resulting in numerous mongrel types that the Egyptian artists do not necessarily record accurately (see further Osborn and Osbornova 1998: 66–9).

These short dogs were also used on the hunt and in this tomb scene Khnumhotep emphasises that all his dogs are hunters by the fact that he carries two throw-sticks (a kind of boomerang) with which he will bring down game (see HUNTING). The short-limbed hounds possibly served as retrievers once the master had brought down birds and small mammals.

4. The mastiff – canine muscle

*Line drawing of a detail based on a stone panel from the North
Palace of Ashurbanipal, Nineveh, Neo-Assyrian, c. 645 BCE*



COMMENT: Standing at about 80 cm at the shoulder and sturdily built, with a short coat and pendant ears, the mastiff was the most powerful of the dogs of antiquity. The type can be dated back to at least the third millennium BCE in Uruk, Iraq, and it is possible that mastiffs were introduced from there into Egypt through trade or tribute with Mesopotamia: a Predynastic Egyptian relief and a series of ivory figurines perhaps depict the mastiff, as does a VI Dynasty offering scene, as well as a painted scene from the tomb of Neferhotep of the XVIII Dynasty (Brewer, Clark and Phillips 2001: 37; Osborn and Osbornova 1998: 60). Mastiffs are represented in art throughout Mesopotamian history. A terracotta plaque from Nimrud in Iraq dating to c. 1750 BCE (Brewer, Clark and Phillips 2001: 56, fig. 4.4), for instance, shows a large mastiff being walked on a leash, and another terracotta depicts a child riding on a mastiff's back (Aynard 1972: 56–7).

The Assyrian use of mastiffs is well represented on the (once painted) wall reliefs of the North Palace of King Ashurbanipal at Nineveh where they are employed (in the company of dog-handlers) to guard the perimeters of a sporting arena in which the king slaughters lions and, in

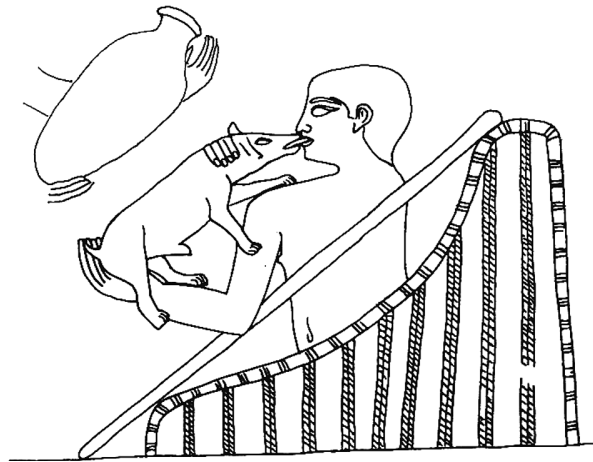
a separate hunting composition, they are used, because of their bulk and muscle, to bring down fully grown wild asses. The dogs are heavily muscled and seem to strain at the leash; their focus is directly to the front and their tails are held erect in an attitude of intense anticipation.

Six bronze figurines of mastiff dogs were discovered by excavators at the northwest palace of Nimrud and had probably been intentionally buried as protection against evil forces entering the royal residence (Wiggermann 1992: 15–16). Another set of clay model dogs were actually found buried beneath a doorway into the palace at Nineveh. Painted in bright colours, the dogs are inscribed with talismanic names: ‘Expeller of evil’ (*mušēsu lemmūti*) with white pigment and red spots, ‘Catcher of the enemy’ (*kāšid ayyāb*) with red pigment, ‘Don’t think, bite!’ (*ē tamtallik epuš pāka*) with white pigment, ‘Biter of his foe!’ (*munaššiku gārīšu*) with turquoise pigment and ‘Loud is his bark!’ (*dan rigiṣṣu*) with black pigment (Curtis and Reade 1995: 116–17).

The mastiff was also known in Iran. A reclining steatite statue of a mastiff, known as the ‘dog of Sumu-Illum’, shows that the type was known to the Elamites (Borowski 1998: 137, fig. 4.3), while from the Achaemenid period, two fine life-size seated statues of the dog were erected at the doorway of the Apadana at Persepolis where they served as powerful guardian figures. In Zoroastrianism the dog held a special place, was revered for its courage and loyalty, and consequently played a role in purification rituals (Kawami 1986 and Root 2002). The Persepolis dogs have a distinct leonine quality, particularly the heavy, compact chest, the well-sprung, almost barrel-like rib cage and the carefully modelled toes with prominent claws; many Near Eastern societies considered the dog family to include not only domestic dogs, wolves, hyenas and jackals, but also lions.

5. Puppy-love

Painted wall relief from the tomb of Kagemni, Saqqara, VI Dynasty (Osborn and Osbornova 1998: 63, fig. 7.35)



COMMENT: This intriguing scene depicts a puppy lapping milk from the mouth of a man (the milk has come from the jar which is proffered from the left of the picture). Some confusion has resulted from this picture, and Janssen and Janssen (1989: 34, fig. 27) label it ‘A swineherd weans a sucking piglet using milk on his tongue’; in their line-drawing of the relief they depict the animal with pointed trotters. But they are mistaken: close examination of photographs of the relief clearly show paws, not pointed hoofs (as has been correctly identified by Osborn and Osbornova 1998:

63 and Evans 2010: 104, fig. 7–59, 107–8). In fact the animal lapping the milk is a *tjesm* puppy. He (it is clearly male) has a full, round tummy and a curly tail; his ears are lopped, which might be due to his youth – many erect-eared dogs start life with floppy ears.

The relief is a touching portrayal of the relationship which can develop between man and dog, and even in Mesopotamia, where attitudes towards dogs were harsher than in Egypt, maxims advised people to ‘treat a dog with anger, but a puppy with love’ (Alster 1997 (1): 138). Puppies are often depicted in Near Eastern art. For instance, one terracotta plaque from Iraq shows a mastiff bitch nursing four hungry pups (Borowski 1998: 139, fig. 4.5) and puts one in mind of a popular Sumerian saying: ‘Thus speaks the [bitch] to her whelps: “Whether you are yellow or whether you are multi-coloured, you are nevertheless my beloved children”’ (Alster 1997 (1): 143). One Hurro-Hittite text known as *The Dream of Hedammu* uses an extraordinary playful metaphor to describe a woman’s beauty: ‘[She] ornamented herself, [and beauty was] running after her like puppies’ (Chavalas 2014: 276).

6. Intimidated by packs of pariah dogs

Egyptian letter, reign of Seti II, XIX Dynasty, c. 1200–1194 BCE, Papyrus Anastasi IV 12.5–13.8 (Camino 1954: 189)

If ever a flask of Kedy is opened and people go out to get a cup (of it), there are 200 large dogs as well as 300 jackals, 500 in all, and they stand in readiness every day at the door of the house as often as I go out through their smelling the liquor when the jar is opened. What if I had not the little hound of the royal scribe Nihhu here in the house? It is (he) that saves me from them again and again, as often as I go out. It is ever with me as the leader upon the road. Then it barks and I run to put the bolt on.

COMMENT: This lively letter alerts us to the fact that throughout the ancient world, groups of dogs foraged on communal refuse and intimidated people with their aggressive pack-mentality. The author of the letter is an Egyptian bureaucrat who is staying in a garrison town in Palestine on official business. An outsider to the local community, he is overwhelmed by the number of dogs that parade through the streets and he is grateful for the loyal behaviour of Nihhu’s little domestic dog who keeps the wild dogs of the city at bay. This little dog might well have been trained as a house’s guard dog (there are scattered references to dogs working in this capacity and as sheepdogs too: Isaiah 56.10, Job 30.1, Janssen and Janssen 1989: 12, Rice 2006: 43). The Egyptian letter cited here shows us that within urban settings, dogs were often more feared than adored.

Indeed, the impression received from the Hebrew bible, too, is that packs of feral dogs inhabited the streets of cities, towns and villages. They were permanent fixtures of the community, recognised by the locals who, in turn, were largely ignored by the dogs who only became noisy and aggressive when a stranger entered a community. This is how best to explain a controversial Biblical verse, Exodus 11. 7: ‘among the Israelites not a dog will bark at any person or animal. Then you will know that the Lord makes a distinction between Egypt and Israel.’ The point is made that, as part of the tenth plague on Egypt, the Hebrews would be known by the angel of death and be passed over. In another text, a Hebrew psalmist depicts himself feeling abandoned and surrounded by hostility, and compares himself to a traveller arriving in a strange village and being met by a pack of these half-wild animals: ‘Dogs surround me, a pack of evildoers encircles me’ (Psalm 22.16). Such urban pack dogs were social outcasts and the image of the roaming animal easily entered into everyday imagery: ‘Like a dog, you have no place to sleep’ (Sumerian proverb; see Alster 1997 (1): 141). An Akkadian omen declares ‘if a corner of a city causes dogs to

congregate, quarrels will be continuous in that city' or, as a variant, 'if a corner of the city causes dogs to circle around, the gods of this city will leave it' (Chicago Assyrian Dictionary sv. *kalbu*).

These pariah dogs ('mongrels', as it were) were the genetic consequences of indiscriminate breeding between domestic hounds and feral dogs, and, from the skeletal remains, it appears that they tended to be smaller than sight-hounds, but no less robust (Brewer, Redford and Redford 1994: 116). The feral dogs, still a common sight across the Middle East, pounced greedily at anything edible, including refuse thrown out from domestic spaces. In fact, it was commonplace to throw garbage directly to the dogs (Exodus 22.30–1). In this respect, dogs were likened to pigs which eat anything, and in one of the teachings of Jesus he directly compares the two animals: 'Do not give dogs what is sacred; do not throw your pearls to pigs. If you do, they may trample them under their feet, and turn and tear you to pieces' (Matthew 7.6).

The Hebrew bible notes that with the approach of darkness, once the heat of the day had died down, the pariah dogs would begin gathering together, roaming about, barking and howling: 'each evening they come back, howling . . . and prowling around the city' (Psalm 59.14; cf. Isaiah 56.11) and the noise made by street dogs was proverbial across the ancient Near East:

The fox said to his wife, 'Come! Let us [go to Uruk] . . . Hardly had they come within a distance of 600 *nindan* (2 miles) from the city, before the dogs began to howl from the city. '[Wife] . . . come with me to your place! All kinds of evil is howling from the city!'"
(Alster 1997 (1): 59; compare: 'In the city of no-dog, the fox is overseer', Alster 1997 (1): 68)

7. Eating flesh; lapping blood

Hebrew bible, I Kings 21.23; II Kings 9.30–4

Concerning Jezebel the Lord says: 'Dogs will devour Jezebel by the wall of Jezreel.' Dogs will eat those belonging to Ahab who die in the city, and the birds will feed on those who die in the country. . .

Then Jehu went to Jezreel. When Jezebel heard about it, she put on eye makeup, arranged her hair and looked out of a window. As Jehu entered the gate, she asked, 'Have you come in peace, you Zimri, you murderer of your master?'

He looked up at the window and called out, 'Who is on my side? Who?' Two or three eunuchs looked down at him. 'Throw her down!' Jehu said. So they threw her down, and some of her blood splattered the wall and the horses as they trampled her underfoot.

Jehu went in and ate and drank. 'Take care of that cursed woman,' he said, 'and bury her, for she was a king's daughter.' But when they went out to bury her, they found nothing except her skull, her feet and the palms of her hands. They went back and told Jehu, who said, 'This is the word of the Lord that he spoke through his servant Elijah the Tishbite: On the plot of ground at Jezreel dogs will devour Jezebel's flesh. Jezebel's body will be like dung on the ground in the plot at Jezreel, so that no one will be able to say, 'This is Jezebel.'

COMMENT: In the Hebrew bible, King Ahab of Israel and his infamous Phoenician wife, Jezebel, are threatened with a curse as result of their guilt in connection with the death of one of the king's subjects, Naboth (I Kings 21. 19–23). The prophet Elijah gave a doom-pronouncement against the royal family, stating that the dogs will lick Ahab's blood and will devour Jezebel completely; furthermore, those of Ahab's household who will die in the city will be eaten by dogs, while those who will die in the country will be eaten by scavenging birds. The narrative of the

death of Jezebel at the hands of Jehu, Ahab's rival and usurper, is one of the most dramatic events of the bible (Loewenthal 1972), but the incident of the queen's ingestion by dogs is just one of many instances in which humans are devoured by canines (I Kings 14.11, 16.4; dogs are also depicted lapping human blood: I Kings 21.19, 22.38; for dogs in Jewish culture see Ackerman-Lieberman and Zalashik 2013).

Jezebel suffers the greatest humiliation known in Near Eastern antiquity: her corpse is left unburied (the horror of this is well captured in Deuteronomy 28.25–26 and Jeremiah 16.4). A lack of burial heralded a lack of an afterlife, as becomes clear from a ninth-century BCE curse-text from Sippar in Mesopotamia: 'May his name perish, may his seed be gathered up; in hunger and starvation may his life come to an end; may his corpse fall down, and may it have no one to bury it' (Hallo 1997–2002 (2): 135). In Egypt and the Near East, unburied corpses found their way onto the desert edge, into lakes and rivers, or else they were thrown on to communal refuse heaps; exposed infants were also abandoned on rubbish tips. These garbage tips became centres for pariah dog activity.

One way to ensure that a deceased enemy be denied an afterlife was to feed the body to dogs, or other animals and birds – at least in the imagination. A prayer of Esarhaddon pleads that 'the valley be filled by [enemy] bodies and the dogs eat them' (Wiseman 1953: 61), while Ashurbanipal hopes that '[enemy] corpses will be eaten by dogs' (Kohler and Ungnad 1913: 16). An anti-witchcraft ritual envisages the following torment for a deceased individual: 'May eagle and vulture prey on your corpse, may silence and shivering fall upon you, may dog and bitch tear you apart, may a dog and a bitch tear apart your flesh' (Abusch 1998: 374). An Akkadian curse reads, 'may a dog and a bitch tear you apart, may a dog and a bitch tear your flesh apart' (Chicago Assyrian dictionary sv. *kalbutu*).

Jezebel's grisly death is echoed in a classic of Egyptian literature, the *Tale of the Two Brothers*, in which the wicked wife of the elder brother is killed and then thrown to the dogs (Hollis 2008) while Herodotus (IX.110), drawing on a *bona fide* Persian story, tells a variation on the theme when Masistes' wife is hideously mutilated: her breasts, nose, ears, and lips are cut off and thrown to the dogs (on female mutilation in the Near East see further Amos 4.2–3, 2 Kings 8.11–12, 15.16, Hosea 14.1).

8. Unclean dogs

Hebrew bible, Proverbs 26. 11

As a dog returns to its vomit,
so fools repeat their folly.

COMMENT: The description of the dog that returns to eat from its own pool of vomit is used by the Biblical author to arouse disgust and loathing. In the Hebrew bible, vomit is a symbol of excessiveness and overindulgence which degrades a person (Proverbs 25.16, Isaiah 23.29–35). Therefore, the dog is regarded with revulsion as an overeater (Forti 2008: 93–9; the Hebrew proverb is reiterated in early Christian literature, see 2 Peter 2.22). Near Eastern wisdom literature often employs the same image of the rapacious dog that eats anything it can get hold of: 'A dog eating foul food is a dog that leaves nothing for the next day' (Alster 1997 (1): 67). Moreover, the revulsion towards dogs is amplified by the way in which they groom themselves: 'A dog licks its shrivelled penis with its tongue' (Alster 1997 (1): 68). Not surprisingly, cruelty towards dogs was commonplace ('She grumbles like a dog beaten with a throw-stick' (Sumerian proverb 3.95; Alster 1997 (1): 97); 'a watchdog barked, the payment for its flayed skin came back' (Sumerian proverb UET 6/2 324; Alster 1997 (1): 319); a proverb from Susa (MDP 18.48, Alster 1997 (1): 335) notes, 'A fettered dog quarrels'. See also Proverbs 26.17 for a dog pulled by its ears).

9. Protection against dogs

Neo-Assyrian Akkadian prayer (Foster 2005)

Oh Šamaš, king of heaven and earth,
Judge of above and below,
Light of the gods, guide of humankind,
Who judges the cases of the great gods,
I turn to you, I seek you out.
Command among the gods life (for me),
May the gods who are with you speak favourably of me,
On account of this dog that has urinated on me,
I am afraid, anxious, frightened.
Deliver me from the evil of this dog,
Let me sound your praises!

COMMENT: A prayer to the mighty god Šamaš voices two commonly held anxieties about dogs: that they are unclean and know no social bounds (by urinating on the petitioner), and that they are fearsome creatures. It is no wonder that the word ‘dog’ was an invective in the mouths of all Near Eastern peoples. The grovelling nature of some dogs was also noticed and led to uncomplimentary comparisons with conquered peoples and their kings: ‘I have conquered the inhabitants of Wawat (northern Nubia) and captured the inhabitants of Medja (a nomadic Nubian people) (and) I have caused the Asiatics to walk like dogs (i.e. cringe and grovel)’, states one Egyptian pharaoh (*The Teaching of Amenemhet*). Some political prisoners were collared and chained like dogs: when Ashurbanipal captured the king of Arabia he boasted how ‘I placed a dog’s collar around his neck and made him watch at the city gate’ (Pritchard 1969: 298). After all, as the proverb said: ‘the watchdog hates the dog chain’ (Alster 1997 (1): 136).

‘Dog’ is also used as a personal insult or invective. The Israelite Shimei, who had cursed King David, was greeted by Anishai with the question, ‘Why should this dead dog curse my lord the king?’ (2 Samuel 16.9). Moreover, individuals who wished to humble themselves before their superiors submitted to their authority by calling themselves ‘dogs’. The image of a dog might be employed as a disparagement of oneself, and lowly client-kings or princes often termed themselves the ‘dog of the house of the king’, ‘a dead dog, a nobody’ or ‘a dog who blesses the king his lord’ (Chicago Assyrian Dictionary sv. *kalbu*). A loquacious letter from the XVIII Dynasty Amarna archive (*EA* 320) demonstrates the obsequious grovelling of a Levantine prince towards the Egyptian pharaoh in which the image of a servile dog is used to stress the prince’s self-abasement:

To the king, my lord, my god, my Sun, the Sun from the sky: message of Yidya, the ruler of Ashkelon, your servant, the dirt at your feet, the groom of your horses. I indeed prostrate myself, on the stomach and on the back, at the feet of my king, my lord, seven times and seven times. I am indeed guarding the place of the king where I am. Whatever the king, my lord, has written me, I have listened to very carefully. Who is the dog that would not obey the orders of the king, his lord, the sun of the sun?

Likewise, when King David showed clemency towards his servant Mephibosheth, the slave replied, ‘What is your servant, that you should look upon such a dead dog as I?’ (2 Samuel 9.8; see further 1 Samuel 24.14; 2 Kings 8.13; Job 30.1; Isaiah 66.3). In Ecclesiastes 9.4 the thought that even the most worthless life is preferable to death is expressed with a dog-related image: ‘A living dog is better than a dead lion.’

10. Symptoms of a rabid dog

Old Babylonian incantation from Tell Asmar, Iraq (Whiting 1985: 182)

He is long of leg
quick at running.
He is short of sustenance,
poor in food.
His semen is suspended from his teeth;
wherever he bites, he leaves behind his child.

COMMENT: Rabies is one of the earliest known infectious diseases, with written records indicating that it was present thousands of years ago in Mesopotamia and Egypt (Wasik and Murphy 2012). Two cuneiform tablets dating to c. 1930 BCE from the city of Eshnunna have been preserved which contain instances of law and litigation focused on the well-ordering of urban life (Yaron 1988). It shows that dog owners were held responsible for their animals. Similarly, in the better-known law code of Hammurabi, farmers are required to keep their oxen tethered lest they run amok in the streets and bring about an individual's death (Barmash 2005: 130). Of course, there was no financial recompense for the families of the victims of rabid wild dogs.

It has been suggested that rabies was present in Mesopotamia by the beginning of the second millennium BCE and that the earliest representations of dogs were made at this time as a form of magic protection (Kawami 1986). The subject of rabies forms a large corpus of Sumerian and Akkadian magico-medical literature and there is no doubt that ancient peoples generally were well acquainted with this terrifying disease (even today at least 55,000 people die from rabies every year, mainly in Africa and Asia). As the Babylonian incantation recognises, the virus is present in the salivary glands of rabid dogs and is mainly excreted in the animal's spittle, so that the bite of an infected animal passes the virus directly into the open wound. The virus then swiftly entered the central nervous system to infect the nerve tissues ultimately attached to the victim's brain.

Most infected rabid dogs show regular characteristics: restlessness, anxiety, irritability and viciousness, followed by timidity, paralysis and finally death. Rabid dogs will attack and bite indiscriminately, as a letter from Mari recognises (ARM 3, 18:15): 'Like a rabid dog (Akkadian *kalbu segum*), he does not know where he will bite (next).' Akkadian Proverb 5: 100 notes how diseased dogs respect nothing, and that even acts of human piety go overlooked when the virus takes hold: 'a rabid dog . . . even slips up to (attack) <a man> in prayer.'

11. A rabies epidemic predicted

Akkadian omen. Enuma Anu Enlil astrological texts: Ištar 37 iii 1–8 (Yuhong 2001: 36)

[If in the twelfth month the Venus star, in the same situation as above, appears at sunset, on the horizon . . .], refuge of people [. . .]. Disorder and misfortunes will occur in the land, people will sell their children for money, [. . .] will go and the king of Elam will be taken captive in his palace, his brother (?) will disappear, Elam and its people will die, a famine will take place: there will be no barley or straw; dogs will become rabid and bite [humans], oxen, sheep, and asses. Those that they bite will not survive.

COMMENT: This text is part of a series of extispicy and astrological omens. Unsurprisingly, in the ancient Near East, an outbreak of rabies was thought to be a portentous sign of the fury of the gods, and rabies thus makes an important appearance in the omen readings. Of course, the madness of rabid dogs and the certain death of the human victims of rabies made such a vivid impression on Mesopotamian society that the figure of the rabid dog itself became to be venerated as a demon of disease and as an agent of Ea and Asarluhi, the gods who had a special relationship with healing rituals. This rabid dog demon also finds a place in the Babylonian Epic of Creation as a devoted follower of the chaotic force that was Tiamat, the enemy of Marduk, who was eventually destroyed by him. Since the rabid dog demon was thought to be powerful enough to fight and harm other demons and humans, rulers of Babylonia and Assyria routinely placed images of rabid dogs, and other ogres such as the scorpion-man and bull man, on the doorways and portals of their palaces. It is possible that the sacred dog of the goddess Gula was rabid, but nonetheless housed within the goddess's sanctuary. Gula's sacred dog might have become a divine entity through his association with the rabid dogs which clearly horrified the peoples of ancient Mesopotamia.

12. Odysseus' dog Argos

Homer Odyssey XVII.291–327.

But a dog which was lying there lifted up its head and ears,
Argos, the dog of stout-hearted Odysseus, which he reared himself
But did not have enjoyment of, because he went to sacred Ilium.
In time before the young men used to take him
To hunt wild goats or roe-deer or hare;
But now he lay there despised, his master gone,
On a dung-heap, where the dung from the cows and asses
Was piled up before the doors, so that the slaves
Of Odysseus' house could take it to manure the fields.
The dog Argos was lying there, full of fleas,
But when he realised that Odysseus was near
He wagged his tail and pricked up his ears
Although he could no longer move closer to his master.
Odysseus secretly wiped away a tear, unseen by Eumaeus,
And straightaway addressed him,
'Eumaeus, I wonder at seeing this dog lying on the dung-heap:
He has a fine form, and I wonder
Whether he was as swift in the chase as he appears
Or whether he was a pampered house dog, kept for show.'
The swineherd Eumaeus answered him,
'This dog belonged to a man who died far away;
If you had seen him as he was in looks and power
As he was when Odysseus left him to go to Troy,
You would have been amazed by his speed and strength.
No beast could escape him in the depths of the thick wood
When he pursued it; there was no tracker like him.
But now he has come to a bad end, for his master died
In a far land, and the women ignore and neglect him.
The slaves, too, when their masters are no longer there to rule them,

Don't care to carry out their duties.
Wide-seeing Zeus takes away half a man's virtue,
When the day of slavery comes upon him.'
Saying this he went into the well-built house,
Straight into the hall with the noble suitors.
But fateful death came dark upon the dog Argos
When he had seen Odysseus again after twenty years.

COMMENT: Argos is without a doubt the best-known individual dog in antiquity, and is the archetype of all patient dogs who wait years for the return of an absent master. Ancient commentators on Homer noted the practical difficulty with Argos' story – a dog which was in his prime before Odysseus left for Troy would be most unlikely to have lived for a further twenty years – but it is clearly poetic licence to allow Argos to be the only creature capable of recognising his master after his long absence. The attitudes towards dogs expressed in the passage are intriguing: Odysseus makes a distinction between the working hound and the 'house dog' whose role is as a pet, yet it is plain that he has forged a personal relationship with Argos. He is appreciated for his qualities as a hunting hound, but also as a dog which Odysseus reared from puppyhood and favoured, suggesting that in practice the boundaries between hound and house dog could be porous. Certainly the many illustrations of young men with dogs in later Athenian pottery depict hounds accompanying their masters in urban life – at the gymnasium, in the street and in music or poetry lessons (Kitchell, forthcoming; see also PETS no. 3). It is easy to imagine how the desire to show off a particularly impressive hunting dog could lead to the formation of an individualised relationship with the owner.

13. Hunting with dogs

Xenophon On Hunting 4.3–11

Good hunting dogs should follow the scent away from the trodden path, quickly departing from it and keeping their heads low to the ground and slant, smiling when they pick up the scent and lowering their ears; they should go forward along the trail all together towards the form, wagging their tails and keeping alert, circling round often. When they are close to the hare they should signal this to the huntsman by quickening their pace, and show it more clearly by their enthusiasm, by the movement of their head and eyes, by changes of posture, by looking up from and back to the undergrowth, by running to and from the hare's hiding-place, and by dashing back and forth and to the side, with a genuine excitement because they are close to the hare. They should give chase vigorously and without rest, with much noise and barking, and should follow the hare right to the very end. They should run swiftly and valiantly, changing course rapidly and giving tongue as they go; they should not return to the huntsman and lose the trail.

Besides the above appearance and behaviour, a good hunting dog should be brave, keen-nosed, sure-footed and with a good coat. A brave dog will not leave the hunt even when it is very hot; a keen-nosed dog will track the hare across cold and dry terrain, or land exposed to the summer sun; a sure-footed dog will not damage its feet running in the mountains at the height of summer; and a dog with a good coat will have hair that is fine, thick and soft. Dogs should not be of a solid colour, either tawny or black or white, because this is not a sign of good breeding, resembling as it does the wild strain. Tawny and black dogs should have a white patch around their face, and white dogs a

tawny patch. Above the thighs the fur should be straight and thick, and around the loins and below the tail, but above it should be of medium thickness.

It is better to hunt the dogs frequently over the mountains rather than across the cultivated land, because in the mountains they can track and run freely, which is not possible over farmland because of the trodden paths. It is also a good idea to take the dogs out into rough country, even if they do not find a hare, because this helps to strengthen their feet, and working hard in such places conditions their body. In the summer the dogs should be taken out until midday, in the winter for the whole day, in autumn at any time except midday, and in spring before the evening; at these times the temperature is mild.

COMMENT: This extract from Xenophon's handbook *On Hunting* describes the care and training of hounds, and how to hunt with them; it is one of a number of practical treatises written in the fourth century BCE which aimed to systematise knowledge in different areas. Many later writers produced works on the same topic, of which the best-known is Arrian's *On Hunting* from the second century CE. The most striking feature of these works is the care taken over hunting dogs: high-quality hounds were expensive – Alcibiades in Athens is said to have spent 70 *minas* on a single dog (Plut. *Alc.* 9) – and functioned as markers of status. Obviously hunting with dogs of this kind was the pastime of the wealthy, and Xenophon and Arrian describe in extensive detail the breeding, training and care of hounds, including their daily routines and grooming. The technical writers are in broad agreement about the physical qualities of the best hounds, and of techniques in hunting, but there are some contradictions – Arrian, for instance, says that solid coat colours are not a defect (6.1). Despite the emphasis in antiquity on the pursuit of fierce and impressive animals, most authors assume that hares, deer and wild goats are the standard quarry for their audience; it is evident that hunting of this kind, while it might have provided game for the table, was more a leisure pursuit than a means of livelihood.

14. A drinking cup in the form of a dog

Attic animal-head rhyton, Corsica, Aleria Musée Départemental d'Archéologie, c. 480 BCE, attr. Circle of the Brygos Painter (Photograph courtesy of Collections Musée départemental d'archéologie d'Aléria, Haute-Corse; photograph by M. J.-M. Bontempi)



COMMENT: This cup is a *rhyton*, a one-handled mug made in the form of an animal head: it is shown here with the handle and painted rim at bottom right in order to best display the hound's head chosen for its form. *Rhyta* were made in Attica and South Italy in a variety of animal types: this example is from Attica, though found in Corsica, and is a particularly fine specimen. The dog, clearly a hunting hound, is shaped with great precision, and the painter has used the black glaze of the pot to evoke the dog's sleek coat. The wide bright eyes and expressive mouth show the Greek appreciation of the dog's intelligence and ability to communicate. While dog *rhyta* are not the most common form – domestic animals and deer were the most frequently chosen (Hoffmann 1989) – dogs are one of the most commonly depicted animals in Greek vase-painting, and appear in every aspect of life, as hunting and working dogs, with their masters at work or leisure, and as pets with women and children (Calder 2011).

15. Faithful dogs

Pliny Natural History VIII.142–7

Of those animals which live alongside us, many are worthy of consideration, and the most faithful to mankind are the dog and the horse. We are told of a dog which fought in defence of its master against bandits, and would not leave his body even though covered with wounds, protecting it from birds and wild animals; and of another dog in Epirus which recognised in a crowd the man who had murdered its master, and by its barking and snapping forced him to confess to the crime. The king of the Garamantes was accompanied by two hundred dogs on his return from exile, which fought those who opposed him, while both the Colophonians and the Castabalenses used dogs in warfare, which fought in the front line and never deserted their post, most faithful allies, and ones which never required pay. And when some of the Cimbri had been killed, their dogs defended their houses which are carried on wagons. When Jason the Lycian was killed, his dog refused to eat and died of starvation. And Duris says that the dog of King Lysimachus, which was called Hyrcanus, threw itself onto his funeral pyre, as is also said of King Hieron's dog. Philistus mentions Pyrrhus, the dog of the tyrant Gelon, while the dog belonging to Nicomedes, king of Bithynia, is said to have attacked his wife Consingis, because of a lewd joke which she played with her husband.

At Rome, when the famous Vulcatius (who taught civil law to Cascellius) was returning from his estate on his cob as it was getting dark, his dog defended him from a street-robber, and when the senator Caelius, who was ill, was set upon by armed men at Placentia, he too was protected by his dog, and was not wounded until the dog had been killed. But the most remarkable example of canine fidelity in our time is found in the annals during the consulship of Appius Iunius and P. Silius [28 CE] when punishment was exacted on Titus Sabinus and his slaves because of his connection with Nero, Germanicus' son. A dog belonging to one of them could not be driven away from the prison, nor, when its master's body was thrown out onto the steps, would it leave the corpse, howling mournfully before a great crowd of Roman onlookers; and when one of the bystanders threw it some food, it carried it to its master's mouth, and even when the body had been cast into the River Tiber it swam out after it and tried to hold it up, while a huge crowd streamed out to see the dog's fidelity.

Dogs are the only creatures which know their master, and can recognise a stranger who suddenly arrives; they are the only animals to know their own name and to recognise a family member's voice. They can remember a journey, no matter how long,

and no animal apart from humans has a better memory. Their ferocity in attack can be mollified if a person sits down on the ground. Many other of their qualities can be seen in everyday life, but their intelligence and skill is most obvious in hunting. They search out and follow tracks, dragging the hunter who accompanies them by the leash to the quarry, and when they have spotted it, how silently and secretly they give indication of it, first with the tail and then with the muzzle. For this reason, even when dogs are worn out by age and blind and weak, hunters carry them in their arms, so they can scent the breezes and trails, and stretch out their muzzles towards the quarry's hiding-place.

COMMENT: Pliny's description of the dog in his *Natural History* consists primarily of this discussion of dogs' loyalty to their masters, together with an account of famously courageous hunting dogs. His stories are compiled from a survey of historical sources, and the range of accounts from which he draws demonstrates how common the theme of the dog faithful to (or beyond) death had become. Similar stories are found throughout Greek history, such as the rather sad story of Xanthippus' dog, which refused to be left behind during the evacuation of Athens in 479, and swam across the strait to Salamis beside the ship on which his master was travelling, dying of exhaustion once he reached the island (Plut. *Them.* 10.6). Clearly there was a consistent tradition of stories which exemplify canine fidelity, but the bond between dog and owner does seem to have been of a different quality from other animals: Varro (*De re rust.* II.9.6) recounts how some sheepdogs which had been sold along with a flock of sheep to a new owner journeyed alone the length of Italy from Metapontum back to their former masters in Umbria. It is notable, though, that we find no reciprocal stories of exceptional human devotion to dogs: owners may show grief at the death of their dogs, but the loyalty is entirely on the canine side.

16. Molossian hounds

a) Roman marble sculpture, London British Museum no. 2001.1010.1, second century CE. Photograph © The Trustees of the British Museum



b) Lucretius *De rerum natura* V.1063–72

When great Molossian dogs are provoked and draw back their heavy jowls, baring their strong teeth, and begin to growl, their fury threatens with a very different sound from when they bark, making the neighbourhood ring with their voice; and again, when they lick their puppies with a caressing tongue, or nurse them, taming the power of their paws and playing with gentle bites, the comfort them with little yelps, very different from their baying when left alone to guard the house, or when they whimper and cower away from blows.

COMMENT: This sculpture, now in the British Museum (where it is known as the ‘Jennings Dog’), is a Roman copy of a Hellenistic original, and portrays a powerful dog of the Molossian type, with shaggy fur and large paws. It was found near the site of Antoninus Pius’ imperial villa at Lanuvium. Molossians were both imposing guard dogs and heavy hunting hounds, suitable for challenging boar and other large animals. The Molossian type was known as early as the sixth century BCE, when the tyrant of Samos, Polycrates, is said to have imported the best animal stock to his island, including Molossian dogs from Epirus, and Aristotle describes them as both hunting and herd dogs (Athen. *Deipn.* 540c–d, Ar. *HA* 608a 28–31). Among the Romans they were the preferred breed of guard dog and the extract from Lucretius, focusing on the wide range of sounds which animals can make, identifies them as dogs kept to deter intruders with a display of aggression, and to guard an empty house.

Dogs were a common theme in Roman sculpture, and artists show attention both to their physical form, from greyhounds and terriers to great hunting dogs like this, and to their behaviour: well-known works include the pair of hounds playing together, copies of which are in both the Vatican and the British Museum (Toynbee 2013: 44, Phillips and Willcock 1999: cover), and the bitch with puppy, also in the Vatican (Merlen 1971: fig.12). Many dog statues were created to decorate the garden or doorway of a house, as an artistic representation of the watchdog, like the famous floor mosaics of dogs in Pompeian houses (King 2001: 411).

17. Dangerous dogs

Greek Anthology IX.24 (*Antiphanes of Macedon*)

At the doorway to Petale’s ill-fated chamber not Hymen
Stood, but Hades; bitter was her marriage.
For as she fled alone in the dark, fearful
As all maidens are of Cypris’ rites,
The pitiless watchdogs killed her. We hoped
To see her as a bride, but suddenly
Even her corpse was lost to us.

COMMENT: This rather macabre epigram from the *Greek Anthology* offers stark illustration of the consequences of keeping ferocious guard dogs at house or farm. The practice of keeping a pack of semi-feral guard dogs is well illustrated in Homer’s *Odyssey*: when the disguised Odysseus approaches Eumaeus’ steading he is met with four extremely threatening guard dogs, and is forced to drop his staff and sit on the ground to avoid being attacked; when Eumaeus comes to investigate the commotion, he drives the dogs away by throwing stones at them (*Od.* XIV.29–36). Likewise when Priam predicts his own death at the sack of Troy in the *Iliad*, he imagines his body

being eaten by his own guard dogs (*Il.* XXII.66–71). In the Roman empire the many mosaics from Roman houses warning ‘*Cave canem*’ (‘Beware of the dog’), and the testimony of writers such as Petronius, who describes Trimalchio’s huge and ill-tempered guard dog in the *Satyricon* (= HUMAN no. 12), show us how common guard dogs were. They were, however, by their nature difficult to control and there is a constant background of complaint in Greek and Roman literature about the damage done by dogs: theft of food, injuries to people or other animals and even, as in this case, unintended fatalities. But the value of the dog for the protection of property made such consequences tolerable at a broad social level and should also be put in the context of the violence of ancient societies generally (see Calder 2011: 69–73).

18. The sacred dogs of Asclepius

IG IV² 1.121 ll.125–6; 1.122 ll.35–8

Lyson of Hermione who was blind; his eyes were healed by one of the temple dogs while he was awake, and he departed cured.

A dog healed an Aeginetan boy who had a growth on his neck. When he entered the sanctuary one of the sacred dogs licked him with its tongue while he was awake and made him well.

COMMENT: These two inscriptions record cures at the shrine of Asclepius at Epidauros. The temple was a major healing centre in the fourth and third centuries BCE, and a large number of inscriptions and votives set up by grateful patients recording cures have been found there. Many cures were effected by the god himself in a dream, as the patient slept overnight in the sanctuary, but these two record cures performed by the dogs sacred to Asclepius which lived in the temple: they clearly roamed freely within the sanctuary, and embodied the healing power of the god. Both the dog and the snake were attendants of Asclepius, and statues often depict him with one or both (Edelstein and Edelstein 1998: 228).

This is the most prominent role played by the dog in classical religion; sacred dogs are mentioned at a number of other shrines in Sicily and Italy (Ael. *NA* XI.3, 5, 20), though here they played no role in the religious rites. Dogs were rarely sacrificed (only to chthonic deities such as Hecate) and their role in divination was also limited; while votive figurines of dogs are sometimes found, these too are most often in the context of healing shrines (Toynbee 2013: 123–4).

19. Scavenger dogs in Athens

Thucydides History of the Peloponnesian War II.50

The nature of this plague was more terrible than words can describe, and its effect on the individual sufferer was virtually beyond endurance. The extraordinary nature of the disease was shown in one way in particular: although there were many bodies lying unburied, the birds and animals which feed on carrion either did not approach them, or if they did, died of eating them. Evidence for this can be found in the fact that all the birds of prey disappeared at that time, and were not found either around the bodies nor anywhere else. But it was the dogs, because they are creatures which live with mankind, which provided the best illustration of the phenomenon I have described.

COMMENT: The idea of scavenger dogs which eat dead bodies is a *topos* of classical writing on battles: warriors fear being left on the battlefield as prey for wild birds and dogs. Many tragic heroes dwell on this aspect of their fate, and it is one of the aspects that makes the central dilemma of Sophocles' *Antigone* so powerful (205–6). Thucydides' description of the plague at Athens in 429/8 BCE should bring home to us that the scavenging dog pack was a common sight in every ancient town: the large number of dogs in human communities inevitably led to strays and unwanted puppies, which combined with wandering dogs to scavenge the rubbish of the town. In Imperial Rome the future emperor Vespasian famously saw a stray dog wander into the room as he was eating breakfast and drop a human hand from the crossroads (*trivium*) under the table (Suet. *Vesp.* 5.4). Such dogs, along with flesh-eating birds, undoubtedly did a great service to communities in eating their refuse (see also PIG), and Thucydides' comments are a salutary reminder of the realities of life in classical cities.

Bibliography

- T. Abusch, 'Ghost and god. Some observations on the Babylonian understanding of human nature', in A.I. Baumgarten, J. Assmann and G.G. Stroumsa (eds), *Self, Soul, and Body in Religious Experience* (Leiden 1998).
 P. Ackerman-Lieberman and R. Zalashik, *A Jew's Best Friend? The Image of the Dog Throughout Jewish History* (Brighton 2013).
 B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
 D. Arnold, *An Egyptian Bestiary* (New York 1995).
 J.M. Aynard, 'Animals in Mesopotamia', in A.H. Brodrick (ed.), *Animals in Archaeology* (London 1972).
 P. Barmash, *Homicide in the Biblical World* (Cambridge 2005).
 O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (London 1998).
 D. Brewer, 'Hunting, husbandry and diet in Ancient Egypt', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 427–56.
 D. Brewer, T. Clark and A. Phillips, *Dogs in Antiquity – Anubis to Cerberus. The Origins of the Domestic Dog* (Oxford 2001).
 D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals. The Egyptian Origins* (Warminster 1994).
 J. Busuttil, 'The Maltese dog', *Greece and Rome* 47 (1969), 88–93.
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 R.A. Caminos, *Late Egyptian Miscellanies* (London 1954).
 M. Chavalas (ed.), *Women in the Ancient Near East* (London 2014).
 J.E. Curtis and J. E. Reade, *Art and Empire: treasures from Assyria in the British Museum* (London 1995).
 B. Ebbell, *The Papyrus Ebers* (Oxford 1937).
 E.J. Edelstein and L. Edelstein, *Asclepius: collection and interpretation of the testimonia* (Baltimore 1998).
 L. Evans, *Animal Behaviour in Egyptian Art. Representations of the Natural World in Memphite Tomb Scenes* (Oxford 2010).
 T.L. Forti, *Animal Imagery in the Book of Proverbs* (Leiden 2008).
 B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 2005).
 W. Hallo, *The Context of Scripture* (3 vols) (Leiden 1997–2002).
 M. Hilzheimer, 'Dogs', *Antiquity* 6 (1932), 411–19.
 H. Hoffmann, 'Rhyta and kantharoi in Greek ritual', *Greek Vases in the J. Paul Getty Museum* 4 (1989), 131–66.
 S.T. Hollis, *The Ancient Egyptian 'Tale of the Two Brothers'* (Oakville 2008).
 D.B. Hull, *Hounds and Hunting in Ancient Greece* (Chicago 1964).
 J. Janssen and R. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
 C. Johns, *Dogs: history, myth, art* (Cambridge, MA 2008).
 T.S. Kawami, 'Greek art and Persian taste: some animal sculptures from Persepolis', *AJA* 90.3 (1986), 259–67.
 A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
 K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
 K.F. Kitchell, 'It's a dog's life: naturalistic canine representations from Athenian art', in B.F. van Oppen (ed.), *Animals in Ancient Material Cultures* (Amsterdam forthcoming).

- J. Kohler and A. Ungnad, *Assyrischen Rechturkunden* (Leipzig 1913).
- L. J. A. Loewenthal, 'The palms of Jezebel', *Folklore* 83.1 (1972), 20–40.
- M. MacKinnon, 'Sick as a dog: zooarchaeological evidence for pet dog health and welfare in the Roman world', *World Archaeology* 42.2 (2010), 290–309.
- S. McHugh, *Dog* (London 2004).
- R. H. A. Merlen, *De canibus. Dog and Hound in Antiquity* (London 1971).
- C. Morris, 'Animals into art in the ancient world', in L. Kalof (ed.), *A Cultural History of Animals in Antiquity* (Oxford 2007), 175–98.
- D. J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- A. A. Phillips and M. M. Willcock, *Xenophon and Arrian on Hunting* (Warminster 1999).
- J. B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament with Supplement* (Princeton 1969).
- L. Rawlings, 'A dog called *hubris*', in S. Lambert (ed.), *Sociable Man: essays on ancient Greek social behaviour in honour of Nick Fisher* (Swansea 2011).
- M. Rice, *Swifter than the Arrow. The Golden Hunting Hounds of Ancient Egypt* (London 2006).
- M. C. Root, 'Animals in the art of ancient Iran', in B.-J. Collins (ed.), *The History of the Animal World in the Ancient Near East* (Leiden 2002), 169–210.
- J. M. C. Toynbee, *Animals in Roman Life and Art* (ed.² Barnsley 2013).
- R. Yaron, *The Laws of Eshnunna* (Leiden 1988).
- W. Yuhong, 'Rabies and rabid dogs in Sumerian and Akkadian literature', *Journal of the American Oriental Society* 121.1 (2001), 32–43.
- B. Wasik and M. Murphy, *Rabid: a cultural history of the world's most diabolical virus* (London 2012).
- R. M. Whiting, 'An Old Babylonian incantation from Tell Asmar', *Zeitschrift für Assyriologie* 75 (1985), 179–87.
- F. A. M. Wiggermann, *Mesopotamian Protective Spirits: the ritual texts* (Groningen 1992).
- D. J. Wiseman, *The Alalakh Tablets* (London 1953).

WEASEL

Several mustelids inhabited North Africa in antiquity. The Saharan striped weasel (*Ictonyx libyca*), for instance, had the appearance of a skunk, with a black head and body decorated with longitudinal white stripes (and, like a skunk, it excretes foul-smelling liquid from its anal glands when attacked). It is small and delicate, with a body length of up to thirty centimetres and a long, bushy tail. It was found in ancient Egypt alongside the common Egyptian weasel (*Mustela subpalmata*). However, ancient Egyptian sources make few distinctions, if any, between mustelid types and any attempt at a definite identification of animals depicted in iconography is at best hazardous. A number of Old Kingdom depictions of various mustelids are known but they are all referred to in the hieroglyphic texts simply as *gsfn.w*. Similarly in the Near East, cylinder seals occasionally show tiny mammals disporting themselves between the legs of the bigger creatures, but these images are on so small a scale and are depicted in such an abstract manner that it is difficult to determine whether they represent weasels and other mustelids or simply creatures of fantasy.

A number of small mustelids – weasels, polecats and martens – were found around the northern Mediterranean in classical times, though they were not very clearly distinguished by Greek or Roman writers. Greeks referred to two animals, the *galē*, probably the least weasel (*Mustela nivalis*), and the *iktis*, which Aristotle says has a white belly and is fond of honey as well as eating rodents, persuasively identified as the stone marten (*Martes foina*) (HA 612b 1–4, 10–17). Romans used the term *mustela* more indiscriminately, though they also recognised the *viverra*, the marten or polecat. Kitchell (2014: 67–8, 153) states that the 'Pontic mouse' of Aristotle (HA 600b 14) and Pliny (NH VIII.132) can be identified with the ermine (*M. erminea*), a stoat which turns white in the winter, but it seems much more likely that this is the marmot.

Classical accounts of weasels are odd in several ways: they are described as creatures which lived alongside humans, common inhabitants of the house, yet there is little extensive discussion

of them, and the evidence has generated considerable debate about the nature of their relationship with humans. Their primary characteristic in the ancient mind was their habitual pursuit of mice: a fragmentary papyrus from a mummy-wrapping preserves part of a mock-epic poem, *The Battle of the Mice and the Weasel* (Schibli 1983). Yet while they were familiar animals, weasels were also seen as repellent (e.g. Semonides VII.50–6) and were considered to be bad omens and connected with witchcraft (e.g. Arist. *Ecl.* 791–3; Thphr. *Char.* 16.3; Dio LVIII.5.5; Apul. *Met.* II.21); perhaps this last idea came from observation of their fierce nature which belies their small size. Depictions of mustelids in classical art are also confusing: a number of representations in vase-painting and sculpture have been identified, but confidence in the identification is rare, as for example on the Attic pyxis lid in Berlin (F2517) which shows two animals eating from dishes in a pantry where mice play (Mitchell 2012: fig. 11) and where the animals have been variously identified as weasels, cats, foxes and dogs (Calder 2011: 64–5; Benton 1969: 261; Mitchell 2012: 50–2). Calder lists three other representations of weasels on Greek pottery, but Benton states categorically that these are cats. Several Etruscan and Roman bronze lampstands include the figure of a sinuous creature climbing the central post in pursuit of a bird, but once again identifications vary between cat and weasel (British Museum 1756.0101.530 and 1772.0302.43; Oxford, Pitt-Rivers Museum 1884.116.95.1–3). The only clearly identifiable weasel from the ancient world, a silver statue once in the Mildenberg collection, has since been sold to an unknown collector (Calder 2011: fig. 7B).

1. Weasel (?) on the hunt

*Old Kingdom tomb of Idut, V Dynasty
(after Osborn and Osbornova 1998: 90)*



COMMENT: Many Old Kingdom tombs depict mustelids among the abundance of wildlife on the wall-paintings, although certain identification of individual species is next to impossible:

weasels, stoats, mongooses and genets are all confused in scholarship. Artists accurately show the behaviour of this small predatory species in the wild and twenty-three scenes show them hunting – usually small birds and insects. Mating scenes are known (Evans 2010: 161–3), and one relief even shows two females giving birth (Houlihan 1996: 42, fig. 32). The animal represented in Idut's tomb, stealthily grabbing chicks from a nest of waterfowl, has climbed up a lotus flower's stalk which bends beneath its weight. This led Evans (2010: 117–19) to suggest that the predator may actually be a common genet, a light and nimble animal, often kept within Egyptian homes as pseudo-pets and pest-controllers (Osborn and Osbornova 1998: 91). A mongoose (?) peeps into the scene at the lower edge, hoping to take advantage of the chaos.

2. House weasels

Aristophanes Peace 1149–52

Bring me the thrush from indoors, and the pair of finches too! There was also a piece of curd and four joints of hare, unless the weasel stole them last night: I heard some kind of commotion in the house.

Pliny Natural History XXIX.60

There are two kinds of *mustela*, one of which is wild; it is larger in size and called *iktis* by the Greeks. The bile of this animal is said to be good against vipers, though otherwise poisonous. The other type of *mustela*, which frequents our houses and (according to Cicero) moves its kits and changes its lair every day, is a great hunter of snakes.

Aesop The Snake and the Galē (Perry 197)

A snake and a weasel were fighting in a house; the mice, which were always being hunted and caught by the two of them, saw that they were at war, and so came out to stroll about. But when the snake and weasel saw the mice, they laid aside their quarrel and turned to catching the mice instead.

It is just the same in a city: those who engage themselves in political conflicts may find that they become victims of the dispute.

COMMENT: Whether weasels were deliberately kept as helpful predators of mice in human households has been the subject of much debate. Some claim that the weasel occupied the niche which the cat was later to fill, as a semi-tame commensal introduced to control rodents (Calder 2011: 63–4); others that they were simply opportunistic hunters that appeared in houses, but created as many problems as they did benefits (Benton 1969). As can be seen, a series of sources from fifth-century Greece to first-century Rome refers to weasels and their habits, but the evidence is not securely on either side. On the one hand, a distinction is drawn in some sources between wild *galai* and those that live in the house (e.g. Ar. *HA* 58b 26), and Theocritus' *Idyll* 15.28 includes a reference to weasels sleeping on spinning wool, leading some to see weasels as tamed animals. The fable above has also been interpreted as evidence for weasels purposely kept as rodent-hunters. On the other hand, Pliny implies that the weasel, though familiar, was a tolerated visitor rather than a chosen pet, and sources from Aristophanes to Petronius describe weasels as a pest, stealing food and killing other pets or fowl (Ar. *Wasps* 363, *Thesm.* 558–9, Varro *De re rust.* III.10.4, Petron. *Sat.* 46). The frequency of references leaves no doubt that weasels did live alongside humans in houses in both town and country, but it seems unlikely that they could be considered pets in the

same way as a cat, being smelly, difficult to housetrain and indiscriminate in their taste for food. Most probably they were regular occupants of the house along with the mice on which they preyed – the two are coupled at Cic. *ND* II.17 and Ael. *NA* XI.19 – but as much of a nuisance as an asset, an idea made explicit in another fable, *The Man and the Weasel* (Perry 293).

3. Ferrets

Strabo Geography III.2.6

Against this lesser nuisance species (i.e. rabbits) several methods of hunting have been devised, and in particular [the Iberians] rear ferrets which come from Libya for the purpose of hunting them: these ferrets are muzzled and released into the burrows, and they drag out with their claws any rabbit which they catch, or else they force the rabbits to escape into the open, where men are standing by ready to catch them.

COMMENT: In his discussion of rabbits in Iberia (see HARE/RABBIT no. 6 for the rest of the text) Strabo refers to *galai agriai*, wild weasels which originate in Libya. This is usually interpreted as our earliest classical reference to the ferret or domesticated polecat; Strabo wrote at the beginning of the first century CE, and Pliny also refers to them in the same context of rabbit-hunting in his slightly later *Natural History*, under the name *viverra* (VIII.218). It is not entirely clear where domestic ferrets originated – some suggest they are descended from the Eastern European steppe polecat (*Mustela eversmanii*), others from the Western polecat (*M. putorius*) (Owen 2008) – but it is entirely possible that they reached the Roman empire from North Africa. Ferrets seem to have spread to Italy and the wider empire in company with the rabbit, which was introduced to aristocratic estates: the bones of a polecat or ferret were found at Settefinestre in Etruria, dating to the second century CE (King et al. 1985: 280, 288). They are mentioned by Columella as a danger to ducks (see DUCK no. 3), and later by Palladius as useful for deterring moles (MOLE no. 2).

Bibliography

- S. Benton, 'Pet weasels: Theocritus xv.28', *Classical Review* 19 (1969), 260–3.
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 D. Engels, *Classical Cats: the rise and fall of the sacred cat* (London and New York 1999).
 L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010).
 P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 A.C. King, P.A. Rhodes, K. Reilly and K.D. Thomas, 'I resti animali', in A. Ricci (ed.), *Settefinestre: una villa schiavistica nell'etruria romana II* (Modena 1985), 278–305.
 K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
 A.G. Mitchell, *Greek Vase-Painting and the Origins of Visual Humour* (Cambridge 2012).
 D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
 C. Owen, 'The domestication of the ferret', in P.J. Ucko and G.W. Dimbleby, *The Domestication and Exploitation of Plants and Animals* (ed.² New Brunswick 2008), 489–93.
 H.S. Schibli, 'Fragments of a weasel and mouse war', *ZPE* 53 (1983), 1–25.
 N. Sykes and J. Curl, 'The rabbit', in T. O'Connor and N. Sykes, *Extinctions and Invasions: a social history of British fauna* (Oxford 2010), 116–26.

CAT

It has traditionally been supposed that cats were first domesticated in Egypt, but evidence now suggests that they lived among people in Mesopotamia around 12,000 BCE, domesticated roughly at the same as dogs, sheep and goats. There is little doubt that the Near Eastern wildcat (*Felis silvestris lybica*) was the ancestor of the modern-day domestic cat and was bred by Mesopotamian farmers and householders as a means of controlling rodents attracted by grain supplies (Rogers 2006: 10–15; Malek 1993: 15–44). It is now thought that all domestic cats in Europe (and the New World) spring from this single source, the tamed *Felis silvestris lybica*.

The discovery of a cat skeleton in a grave dating to c. 9500 BCE on Cyprus (which had no indigenous cat population) suggests that settlers from the Near East brought the animal to the island and it appears from their proverbs that Sumerians were familiar with the behaviour of domestic cats (Sumerian *sa-a*). One text compares the servility of cattle to cats following behind a man holding a basket of food and there are others which refer to cats' love of high places and to their natural curiosity. Mesopotamian art, however, rarely depicts cats (Aynard 1972), and they appear in Akkadian literature only infrequently (Akkadian *šurānu*; wild cat, *murašū*; kitten, *mīrānu*), mainly in omens and magical texts. While cat skeletons have been found in Israel and Palestine (at sites such as Jericho, Ashdod and Hazor), the cat is never mentioned in the Hebrew bible or the New Testament.

As for the Egyptian evidence for early cat domestication, this too has recently been reassessed: excavations of the pre-dynastic site at Hierakonpolis suggest that cats were being domesticated by the Egyptians as early as the fourth millennium BCE. The skeleton of a jungle cat discovered in an elite cemetery and dated to c. 3700 BCE displayed signs of a healed leg fracture, suggesting that it had been kept in captivity until its injury had healed before ultimately being sacrificed. The skeletons of two adult cats and four kittens were unearthed alongside burials of domesticated baboons and dogs. The archaeological report notes that while this is not conclusive evidence for domestication, it extends the relationship between cats and humans in Egypt by almost two millennia (van Neer et al. 2014: 111). The Egyptian household cat (*Felis catus*; Egyptian *mlw* – clearly onomatopoeic – and the feminine *mlt*) is among the most frequently studied creature of antiquity (Ginsburg 1991; Malek 1993; Charron 1989). Wall paintings show it to have been a lithe tabby with a patchy grey coat and black stripes, spots or flecks. Cats were originally kept within Egyptian homes as 'working' animals: they kept mice, rats and snakes out of the house (MOUSE no. 3). By the New Kingdom period cats were also being used in elite hunting expeditions where they acted to flush out small game and birds from the marshes, although it is very difficult to understand just how cats were trained to do this. Images of such sporting collaboration, most famously depicted in the tomb of Nebamun at Thebes, may be idealised (Malek 1993: 66–8, figs 41 and 42; Osborn and Osbornova 1998: 108; see also PETS).

At what point cats began to spread beyond Egypt is debatable; depictions of hunting cats appear in Minoan and Mycenaean art from the first half of the second millennium BCE, but this need not imply the presence of cats in these societies, only the imitation of Egyptian styles. There is a little iconographic evidence (collected in Calder 2011: 64–6) to suggest that some made their way to classical Greece as exotic pets, though domestic cats can be difficult to distinguish from other exotic felines such as the cheetah (see CHEETAH no. 3) and also from the genet, a spotted cat-like relative of the mongoose. Literary sources for cats in Greece are extremely sparse, suggesting that cats remained uncommon: the main role as mouser was occupied by the weasel or ferret until well into Hellenistic times (Calder 2011: 63–4; see WEASEL no. 2). The spread of domestic cats in the Roman world is also difficult to map: they are recognised in Etruscan vase- and tomb-paintings of the fifth century BCE, probably having spread from Egypt via the Greek colonies of South Italy, yet despite

the well-known mosaics of cats from Pompeii – the cat hunting a duck in the House of the Faun and the cat with doves from Santa Maria Capua Vetere – they were not widespread in Republican and early Imperial times: the mosaics are based on Hellenistic pattern books, not taken from life. The scattered evidence for Roman cats undoubtedly reflects the fact that cats did not depend on human direction to extend their range: they plainly travelled by ship, as did mice and rats, and may have been carried unwittingly by traders over long distances. This would certainly account for the appearance of cats in Iron Age Britain, either from Gaul or more distant shores. What is certain is that once introduced, the hardy and well-adapted cat was hugely successful in colonising all human habitations, sometimes interbreeding with native wild species. For most of the classical period cats were valued primarily as pest controllers of the rodents which damaged stored crops and other goods, but later they took on their modern role as amusing and affectionate companions (see PETS).

1. Cat and kittens

Egyptian bronze figurine, Late Period (New York, Metropolitan Museum 29.5a, b). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: Figurines of cats with suckling kittens are well known; they form a distinctive sub-genre of a wide variety of cat-statuettes which also depict cats crouching, sleeping, standing and walking. In this particular instance one of the kittens reaches up to lick its mother's face. These statuettes come in a variety of materials including lapis lazuli, quartz, faience and glass, often with a ring attached to them so that they could be suspended from the neck or from garments as items of personal jewellery. Sometimes they bear inscriptions of a simple wish or prayer to one of the many feline deities of Egypt: 'May Great Bastet, the Mistress of Bubastis give life to Horemheb forever!' or 'May Bastet, Mistress of Ankh-Tawy (Memphis) make life and protection' (Malek 1993: 107). This particular item depicts a cat and her kittens lying on the fragmented remains of a box which would have held a small mummy inside. Mummy boxes of this sort were placed in catacombs together with other ritual offerings, such as cat mummies (see below).

Statuettes and amulets of cats with kittens may have been symbols of fecundity. The goddess Bastet (Bast) was the protector of pregnant women as well as (in her relationship to Hathor) a goddess of joy and sensuality. In the New Kingdom and Late Period dream interpretation texts, there is a correlation between the cat and ideas of fertility and plenty (Malek 1993: 118; Husser 1999: 63):

If a man sees himself in a dream seeing a large cat, it is a good omen, and means that a large harvest will come to him.

If [a woman dreams that she] gives birth to a cat, she will have many children.

2. Mummy of cat

Cat mummy in linen wrappings arranged in geometric pattern, c. 400 BCE–100 CE (New York, Metropolitan Museum 15.6.50). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: Cat mummies have been discovered in vast numbers. Borowski (1998: 145) notes, for instance, that, ‘in the . . . British Museum, there is a cat skull that is the sole survivor of a single consignment of nineteen tons of cat mummies that was shipped from Egypt to England to be ground for fertilizer and spread on the fields’ (see further Clutton-Brock 1981: 110, fig. 10.5). The vogue for mummifying animals on an industrial scale began in earnest in the Ptolemaic period and continued to escalate throughout the Roman era. Sacred animal cemeteries were established alongside temples, animal breeding areas, slaughterhouses and workshops which produced coffins and mummification equipment. The goddess Bastet was especially important in the delta city of Bubastis, which began its rise to prominence during the XX Dynasty; it is here that the most extensive feline catacombs have been found.

The forensic examination of cat skeletons from numerous sacred animal cemeteries reveals the fact that most cats were deliberately slaughtered at a very young age to control breeding (most were aged between one and four months or five and nine months). They were killed by strangulation or by a heavy blow to the head (many cats’ skulls were discovered to have been badly fractured). At Saqqara most of the mummified cats were domesticated and were intentionally bred for slaughter, although wild cats have also been found. An examination of the mummy depicted

here revealed that inside the bundle is a perfectly preserved skeleton of a cat just reaching maturity, whose neck had been deliberately broken. Evisceration took place following death when the cats' bodies underwent the twenty-day (or so) process of drying out using sand or natron before they were smeared with resins, oils and bitumen. Linen bandages soaked in resin were then applied. Most cats were mummified with their hind legs tucked up and their tail brought forward between the back legs; this created a neat, if abstract, package which was made visually appealing through elaborately interwoven linen strips that created a pattern and by the addition of a 'head', actually modelled out of resin-soaked linen (as is the case with the example illustrated here). Malpractice was common: of the 270 cat mummies examined from the Bubastieion at Saqqara, almost a third contained no cats at all and were mainly composed of linen and straw but passed off and sold to pilgrims as a genuine sacred cat and thus offered to the adjoining temple placed in a jar, coffin or cat-shaped container as a votive (Zivie and Lichtenberg 2005; Malek 1993: 126–34). The famous Gayer-Anderson cat in the British Museum was created to be used in a sacred cat cemetery; it is a hollow object and it is possible that a cat mummy was originally placed inside it (Schorsch and Frantz 1998; Spencer 2007).

Because of their very close association with divinity, cats were frequently used in magical ritual, and were sometimes slaughtered as part of the practice. An Egyptian magical text of the third century CE recommends the sacrifice of a cat for many different kinds of spell. The feline deity Sekhmet-Bastet was invoked to protect the cat from the evil that the practitioner enacted in the name of his enemy: 'behold your form being mistreated by [your] opponent [PN] so that you may revenge yourself upon them.' The cat was then drowned and three inscribed metal charms were inserted into its anus and ears and placed on its throat. The dead cat was placed in a tomb and the water that had killed it was sprinkled around to attract the vengeful goddess. The cat's whiskers were kept as charms and were thought to be useful in invoking the sun god Helios (Betz 1992: 22).

3. Gula's cats

Old-Babylonian ritual text (after Böck 2014: 40)

(A man) saw a wounded cat
but pretended [not to notice it].
He saw [...] but (pretended not to notice it). The cats were fighting and
he saw it [but pretended not to notice it].
... (the cats) were wailing and he saw it (but pretended not to notice it). The cats. . .
... were ... they were fighting and he saw it but did not change his face. . .

COMMENT: The Babylonian goddess Gula, the patron deity of healing, was often conceived of in the company of dogs which were considered to be instruments through which she spread her magical-medical aid. That human negligence of dogs was punished by Gula is well known, but this one surviving text shows that the goddess protected cats as well and notes how a man, ignoring a wounded cat, is brought into disgrace.

4. Jumping cat

Campanian lebes gamikos, British Museum F207, from Avella, 340–20 BCE (photograph © The Trustees of the British Museum)



COMMENT: At first sight the scene on this *lebes gamikos* from Campania seems to represent a stylised version of daily life: a seated woman plays with her cat, dangling a bird in front of it to make it jump up, while another looks on. The cat is certainly realistically drawn, its eyes focused on its prey, and its spotted coat shows that it is a domesticated Egyptian *minu*-type. The image of the jumping cat was, however, a stereotypical one in Greek Italy: in the fifth century BCE the *poleis* of both Taras and Rhegium in the toe of Italy minted coins depicting a young man playing with a cat in exactly the same pose (Engels 1999: figs 2.6 and 2.7; Toynbee 2013: 87). The interpretation of the coin imagery has proved difficult: the men are usually identified as the mythological founders of the two *poleis*, Phalanthos and Iokastos respectively, though there is nothing in their myths to connect them with domestic cats, while the feline has been interpreted by some as a panther or panther cub, part of a theme of Dionysiac imagery. In the light of the *lebes* above, however, Engels' identification of the animal as a domestic cat in characteristic pose seems secure. The artist's familiarity with the cat's colouring and behaviour has led many to believe that it was through the Greek colonies of South Italy and France that the domestic cat first spread into Europe. Although archaeological evidence is limited (see Lentacker and de Cupere 1994), MacKinnon documents occasional finds of cat remains in Campania from the Hellenistic period (Engels 1999: appdx. 2), and it does seem likely that cats travelled with the colonists from Greece, either deliberately taken, or of their own accord. The coins and *lebes gamikos* may thus be depicting one of the South Italian *poleis*' characteristic animals, as an identity marker.

5. The cat as hunter

Pliny Natural History X.202

How silent and light-footed are cats when they stalk birds! How cleverly they hide themselves to jump out on mice! They cover their droppings by digging in the earth, because they realise that the smell will betray their presence.

COMMENT: Pliny's very short reference to the cat stands in stark contrast to his lengthy discussion of the dog and its virtues: to Pliny, writing in the first century CE, cats were uncommon animals, so much so that they do not appear at all in his book on mammals, only in his general discussions of animal behaviour in Book 10. He adds observations on the cat's rasping tongue, similar to that of lions and leopards (XI.172) and its eyes which shine in the dark (XI.151). Among ancient natural history writers Pliny seems to write with the most direct experience of cats: Aristotle makes only a few passing references to them, and clearly considered them as foreign animals, classing them with the mongoose (*HA* 540a 10–13, 580a 23–4, 612b 14–15), while Aelian, writing in the third century CE, simply repeats the material about mating and burying of dung (VI.27), and adds some stories about how cats hunt in Africa (V.7, X.29). Even so, archaeological evidence from Pompeii indicates that cats were still rare inhabitants of towns at this period; only two finds of cat bones are known from the first century CE, and King (2001: 426–7) suggests that the cat took some time to replace the weasel as domestic mouser.

Pliny's description of the cat's qualities as hunter might suggest that it was more common in rural areas where there was grain to be protected; certainly Columella and Varro mention cats in their treatises on farming, though only as potential predators of domestic fowl and hares: the instructions for building enclosures for geese (*Col.* VIII.14.9), ducks (*DUCK* no. 4; Varro III.11.3) and hares (Varro III.12.3) include careful plastering and protection of windows to keep out marauding cats, making the point that cats, especially when semi-feral, can be something of a mixed blessing.

6. A Roman cat in Orpington

Roman roof-tile, Bromley Museum, from St Mary Cray (photograph by permission of Bromley Museum)

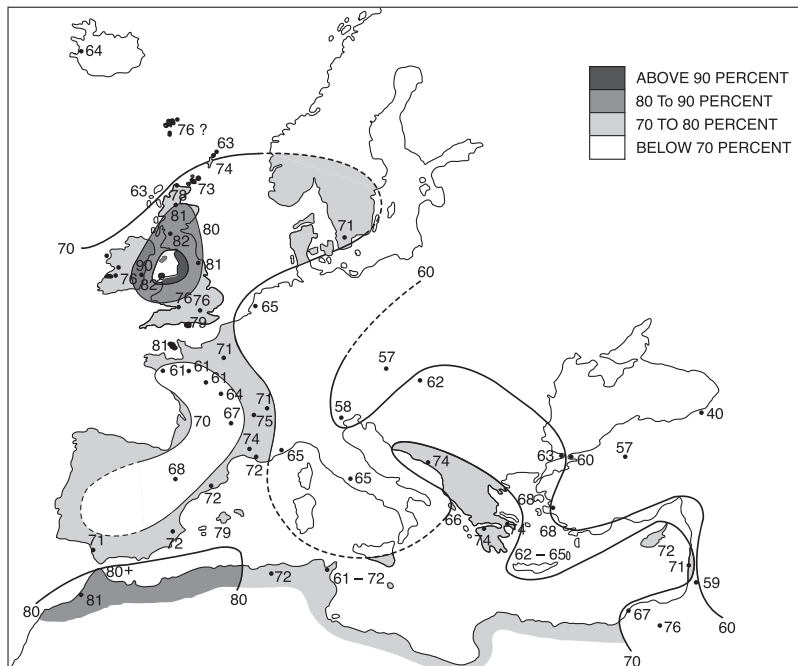


COMMENT: Animal paw-prints are surprisingly common on Roman tiles: during the process of manufacture the moulded clay tiles were left in the open to dry before firing, and wandering animals (and clumsy humans) often trod on them, leaving their imprint; a few superficial paw- or

claw-prints were no reason to discard a perfectly sound tile (Cram and Fulford 1979: 205–6). Tile prints thus bring us close to the day-to-day animal life of a Roman settlement: domestic animal prints are most common, including dogs and cats, chickens, sheep and pigs, though wild animals such as birds, foxes and even badgers also passed over drying tiles. While the prints of dogs are the most frequently found, as one might expect, tiles provide evidence for the spread of cats all over the empire, from Israel (Bar-Oz and Tepper 2010) to Belgium (Ervynck and Pieters 1992) and Britain. Cat-printed tiles have been found at sites all over Roman Britain, at Bothwellhaugh in Scotland, Caesaromagnus (Chelmsford), Colchester and Stonea in Cambridgeshire: at Silchester cats were second only to dogs in number (Maxwell 1975; Legge 1996; Cram and Fulford 1979: 206). Conventional wisdom has always been that cats were a Roman import to Britain, but evidence now indicates that they had been introduced long before: at the Iron Age site of Gussage All Saints in Dorset the remains of seven domestic cats including five kittens were found, dating to the mid-third century BCE, indicating the presence of a breeding colony in the town (Harcourt 1979). That these were not wildcats seems certain: wildcats avoid human settlements, and would certainly not have raised kittens there, nor would wildcat kittens have been hunted. As noted above, cats had plenty of opportunity to travel to Britain with Phoenician and other traders, perhaps more readily because Britain is an island.

7. Coats of many colours?

Cline map of the distribution of the non-agouti (solid colour) allele in domestic cats (after Todd 1977: 104; image © the estate of Bunji Tagawa)



NONAGOUTI ALLELE is distributed as depicted in this cline map. Agouti, named for the South American rodent that exemplifies the condition, is a salt-and-pepper appearance caused by the fact that each hair of the fur has a band of reduced pigmentation below the tip.

The nonagouti mutation eliminates the band and brings about a more uniform pigmentation, which is most commonly black. The distribution suggests that a major focus of the mutation (some 2,500 years ago) was in the eastern Mediterranean, probably Greece or Phoenicia.

COMMENT: What colour were ancient cats? We are used to a wide variety of coat colours among ordinary domestic cats: tabby, black, marmalade, grey and white, together with mixtures of black and white, tortoiseshell and other combinations. In ancient images, however, all cats without exception are spotted tabbies, direct descendants of the *lybica* wildcat type. When did different coat colours arise, and were ancient cats as varied as modern ones? There is no direct evidence from antiquity – Engels’ citation (1999: 75–6) of the sixth-century CE medical writer Aetius is based on a mistranslation – but indirect evidence comes from an intriguing study by Todd, who in the 1970s plotted the prevalence of particular coat colours among domestic cats across Europe (and the US), producing maps to show where black, ginger and blotched tabby coat colour are most common (Todd 1977). His maps revealed some suggestive patterns: in the example above, for instance, black cats, for instance, are more common in Britain and along the western coast of North Africa, with a distinct concentration around the coasts of Spain and France and along the river corridor of the Rhone and Seine. Todd used this evidence to hypothesise that black coat colour in cats may first have arisen in Greece or Phoenicia, and may have been spread by traders to colonial sites in North Africa and around the coasts, with Marseille, at the Mediterranean end of the Rhone, serving as a primary distribution point. The argument is engaging, particularly as black cats have a low concentration in Italy, which may be why they are never depicted in Roman art, whereas a mosaic once in Arausio (Orange) but now lost is supposed to have depicted a black cat (Donalson 1999: 91). Todd similarly suggests that ginger cats originated in Asia Minor, and were spread by Viking traders in the post-Roman period. It is ultimately impossible to prove that black, ginger or tortoiseshell cats lived in the Roman empire, but we do know, from his name Pangur Ban (‘White Pangur’), that the cat praised in an eighth-century CE poem by his owner, an Irish monk at Reichenau, was a white cat.

Bibliography

- A. Ashmead, ‘Etruscan domesticated cats: classical conformists or Etruscan originals?’ in R.D. de Puma and J.P. Small (eds), *Murlo and the Etruscans: art and society in ancient Etruria* (Madison, WI 1994), 144–64.
- J.M. Aynard, ‘Animals in Mesopotamia’, in A.H. Brodrick (ed.), *Animals in Archaeology* (London 1972), 42–68.
- G. Bar-Oz and Y. Tepper, ‘Out on the tiles: animal footprints from the Roman site of Kefar ‘Othnay (Legio), Israel’, *NEA* 73 (2010), 244–7.
- H.D. Betz, *The Greek Magical Papyri in Translation Including the Demotic Spells* (ed.², Chicago 1992).
- B. Böck, *The Healing Goddess Gula. Towards an Understanding of Ancient Babylonian Medicine* (Leiden 2014).
- L. Bodson, ‘Motivations for pet-keeping in ancient Greece and Rome. A preliminary survey’, in A. Podberscek et al. (eds), *Companion Animals and Us. Exploring the Relationships between People and Pets* (Cambridge 2000), 27–41.
- O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (London 1998).
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
- A. Charron, *Les chats des pharaons: 4000 ans de divinité feline* (Brussels 1989).
- J. Clutton-Brock, *Domesticated Animals from Early Times* (Austin and London 1981).
- L. Cram and M. Fulford, ‘Silchester tile making: the faunal environment’, in A. McWhirr (ed.), *Roman Brick and Tile* (Oxford 1979), 201–9.
- M.D. Donalson, *The Domestic Cat in Roman Civilisation* (Lewiston 1999).
- D. Engels, *Classical Cats: the rise and fall of the sacred cat* (London and New York 1999).
- A. Ervynck and M. Pieters, ‘De verspreidingsgeschiedenis van de huiskat: een bijdrage uit Vlaanderen’, *Archeologie in Vlaanderen* 2 (1992), 191–4.
- L. Ginsburg, ‘La domestication du chat’, in L. Delvaux and E. Warmenbol (eds), *Les chats divins d’Egypte: un air subtil, un dangereux parfum* (Leuven 1991), 17–21.
- R. Harcourt, ‘The animal bones’, in G.J. Wainwright (ed.), *Gussage All Saints: an Iron Age settlement in Dorset* (London 1979), 150–60.
- J.-M. Husser, *Dreams and Dream-Narratives in the Biblical World* (Sheffield 1999).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).

- C. Johns, 'The tombstone of Laetus' daughter: cats in Gallo-Roman sculpture', *Britannia* 34 (2003), 53–63.
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- A.J. Legge, 'Imprinted tiles', in R.P.J. Jackson and T.W. Potter, *Excavations at Stonea, Cambridgeshire 1980–1985* (London 1996), 510–15.
- A. Lentacker and B. de Cupere, 'Domestication of the cat and reflections on the scarcity of finds in archaeological contexts', *Colloques d'histoire des connaissances zoologiques* 5 (1994), 69–78.
- J. Malek, *The Cat in Ancient Egypt* (London 1993).
- G.S. Maxwell, 'Excavations at the Roman fort of Bothwellhaugh 1967–8', *Britannia* 6 (1975), 20–35.
- W. van Neer, V. Linseele, R. Friedman and B. De Cupere, 'More evidence for cat taming at the Predynastic elite cemetery of Hierakonpolis (Upper Egypt)', *Journal of Archaeological Science* 45 (2014), 103–11.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- K.M. Rogers, *Cat* (London 2006).
- D. Schorsch and J. H. Frantz, 'A tale of two kitties', *Metropolitan Museum of Art Bulletin* 55.3 (1998), 16–29.
- N. Spencer, *The Gayer-Anderson Cat* (London 2007).
- N.B. Todd, 'Cats and commerce', *Scientific American* 237.5 (1977), 100–7.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- A. Zivie and R. Lichtenberg, 'The cats of the goddess Bastet', in S. Ikram (ed.), *Divine Creatures: Animal Mummies in Ancient Egypt* (Cairo 2005), 106–19.

HUMAN

It is important to include humans in a study of animal sources for several reasons, the first of which is the simplest – because humans *are* animals, thinking, speaking or *polis*-living ones, who made up a part of the ecosystem of the ancient world. More than this, however, the act of including humans among animals shifts our perspective: rather than interpreting animals solely in terms of their value to humans (useful horses, man-eating lions, destructive locusts) it encourages us to see the web of links between animals in different ways: the opportunities offered by human agriculture and settlements to animals from wolves to flies, the conflict created by human encroachment on animal territories and the human facilitation of movement which allowed certain animals to increase their numbers or ranges (see e.g. CHICKEN, PEACOCK, WEEVIL). Finally, modern ideas about human rights often influence our thinking about antiquity either explicitly or implicitly, with the idea that all humans are equal, but this was far from the case in a slave society – as the examples below demonstrate, humans could be defined as possessions or kept as pets in just the same way as animals.

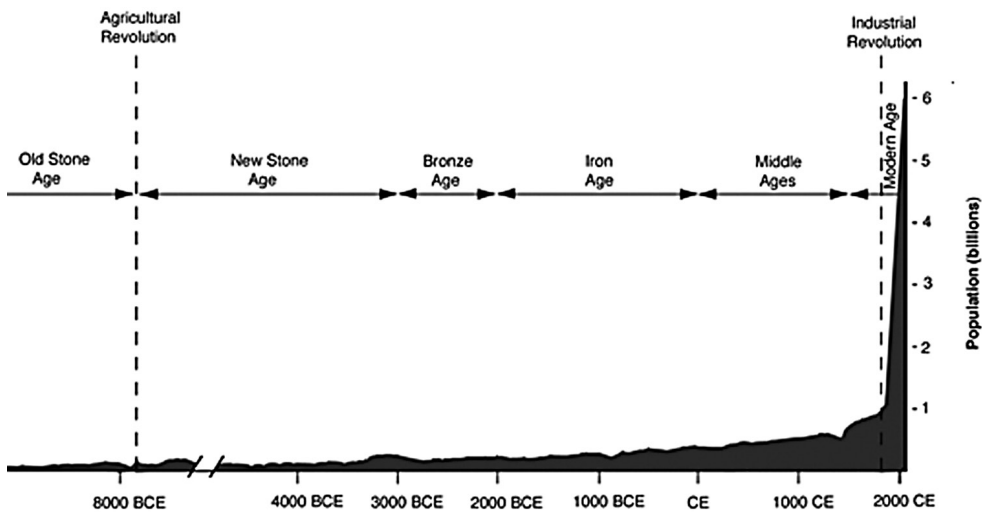
In Near Eastern mythological texts and related iconography, early humans were thought of in two opposing ways: those who were civilised and lived in urban settlements and those who were wild and lived among the animals. Inevitably, however, the myths relate how the wild man was tamed and civilised and brought into the orbit of human society (the Lahmu, for instance, was one such character; see below no. 2). Adam, the Hebrew bible's first man, can also be regarded as a wild man prototype, living among the animals in a state of ecological bliss. The myths all share in the common motif and show the wild men sharing in the life cycles of the animals that surround them. The inevitable 'slide into civilisation' can be seen therefore as a loss of innocence as the wild men reject and ultimately tame the nature that they were once a part of. This ideology is manifest in the image of the Master of Animals found throughout the Near East as well as in a variety of covenant codes which guarantee humans the right to slaughter and eat animals. Furthermore, Near Eastern sources suggest that once removed from his ecological nirvana, man's true animal nature became clear. Civilised, urban man maims, harms, slaughters and devours the animal kingdom simply because he can and his behaviour is endorsed by the gods. Textual

accounts also reveal that the deities find it hard to temper man's monstrous instincts and a commonly held belief across the Near East was that the barrier between man and beast was at best porous and often fractured (see, for instance, Daniel 4. 28–34).

Those writers considering humans in classical antiquity tended to position them in opposition to animals (below no. 11), but at the same time to be strikingly inclusive: Pliny the Elder devoted Book VII of his *Natural History* to humans before proceeding to survey land animals, sea animals, insects and birds in Books VIII to XI, and while the content of his study is extremely various, including examples of both physical curiosities and moral exemplars, one feature stands out: he surveys the many different kinds of human known around the world, including real races such as the Ethiopians and the cannibalistic Scythians, and the strange tribes of India such as the one-legged Skiapodes and the Choromandae who have no speech, and has no difficulty in defining all as part of humankind. The distinctions between different races are clearly considered to be superficial: Roman or barbarian, physically or culturally strange, all are human.

1. Human populations in the ancient world

Graph plotting human population over time (after Cunningham and Saigo 1999)

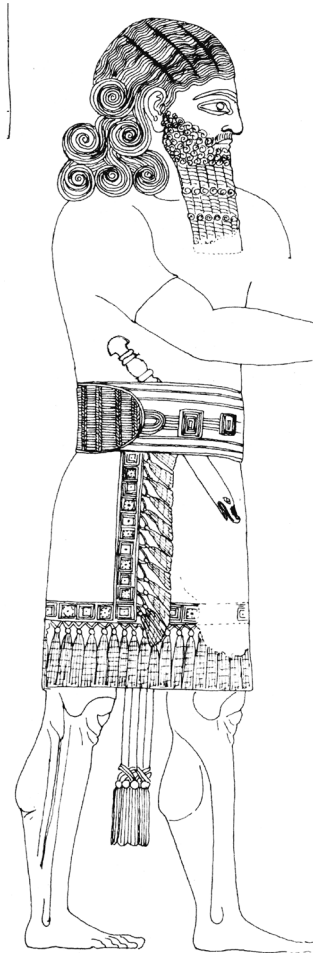


COMMENT: The graph of an exponentially increasing human population is very familiar to a modern audience, but is included here to illustrate how we need to adapt our expectations about human impact on the environment in antiquity. Living in a world in which the sheer number of humans is driving all other wild species to extinction, it can be difficult for us to conceptualise accurately the relationship between ancient humans and the world in which they lived. Populations in the ancient Mediterranean certainly increased throughout the classical period, and great cities with a million or more inhabitants came into existence. Yet it is estimated that at its height the population of the Roman empire was sixty to seventy million (Scheidel 2012: 47): less than the population of modern Britain or France, inhabiting an area stretching from Britain to Syria and from Libya to Germany, and encompassing Bulgaria, Austria, Greece, Turkey,

Spain, Morocco, Tunisia and Egypt. Put simply, the human population in antiquity was never large enough to have more than localised impact on other animal species, or on the landscape itself: ecological pessimists dwell on the decline in the numbers of large wild animals caused by hunting for the Roman arena (Bomgardner 1992), or on habitat destruction (Donald Hughes 2014; Thommen 2012), but there is no evidence for widespread and permanent anthropogenic change. Human populations grew and shrank again within the classical period (Sallares 1991: II.2, 400–1), and large areas of land remained pristine, such as the northern European forest so evocatively described by Pliny (*NH* XVI.2). It was not until the Industrial Revolution that the limits to population imposed by food supply, transport and sanitation were breached, and the world became as it is now.

2. The wild man

***a) Line-drawing detail from a Neo-Assyrian gypsum wall relief
panel from the North Palace, Nineveh, c. 645–40 BCE
(London, British Museum 118918)***



***b) Gilgamesh Tablet I: 101–18, 167–79, 188–202 and
Tablet II: P92–111, 59–62 (after George 1999)***

The goddess Aruru, she washed her hands,
took a pinch of clay, threw it down into the wild.
In the wild she created Enkidu, the hero,
offspring of silence, knit strong by Ninurta.
All his body is matted with hair,
He bears long tresses like those of a woman:
the hair of his head grows as thickly as barley,
he knows not a people, nor even a country.
Coated in hair like the god of the animals,
With the gazelles he grazes on the grasses,
Joining the throng with the game at the water-hole,
His heart delighting with the beasts in the water.
A hunter, a trapper man,
Did come upon him by the water-hole.
One day, a second and a third,
He came upon him by the water-hole.
When the hunter saw him, his expression froze,
But he with his herds – he went back to his lair. . .

Off went the hunter, taking Shamhat the harlot,
they went out on the road, they started the journey.
On the third day they came to their destination,
hunter and harlot sat down there to wait.
One day and a second they waited by the water-hole,
then the herd came down to drink water.
The game arrived, their hearts delighting in water,
and Enkidu also, born in the steppes.
With the gazelles he grazed on grasses,
joining the throng with the game at the water-hole,
his heart delighting with the beasts in the water:
then Shamhat saw him, the child of nature,
the savage man from the midst of the wild. . .

Shamhat unfastened the cloth of her loins,
she bared her sex and he took in her charms.
She did not recoil, she took in his scent:
she spread her clothing and he lay upon her.
She did for the man the work of a woman,
his passion caressed and embraced her.
For six days and seven nights
Enkidu was erect, as he coupled with Shamhat.
When with her delights he was fully sated,
he turned his gaze to his herd.
The gazelles saw Enkidu, they started to run,
the beasts of the field shied away from his presence.

Enkidu had defiled his body so pure,
his legs stood still, though the herd was in motion.
Enkidu was weakened, could not run as before,
but now he had reason and wide understanding. . .

Enkidu ate the bread until he was sated,
he drank the ale, full seven goblets.
His mood became free, he started to sing,
his heart grew merry, his face lit up.
The barber groomed his body so hairy,
Anointed with oil he turned into a man.
He put on a garment, became like a warrior,
He took up his weapon to do battle with lions.
[When at night the shepherds lay sleeping,]
[he struck] down the wolves, he [chased off lions.]
Sleeping lay the senior shepherds,
their shepherd boy Enkidu, a [man wide] awake.

COMMENT: The alabaster wall-panel depicts a Lahmu or wild man figure. He has long hair worn in elaborate ringlets, wears a tasselled kilt and the sheath of his dagger is carved with an animal's head. Although shown here in repose, the Lahmu is more usually depicted wielding his spear in combat with animals (for instance, an Assyrian seal shows him in combat with a lion, ostrich and ibex or goat (BM 89862)) and while some scholars like to see him in the guise of a Master of Animals, his Akkadian name, 'the hairy one' or the 'hairy hero man', indicates that the Lahmu was more *homo ferox* than *homo sapiens*. The hairiness of the Lahmu is key to its identity since the creature inhabited the sphere of the steppe and the wilderness, yet his power was harnessed for mankind's good and he became a protective totem of doorways and liminal spaces. This is best seen in the Lahmu's hairstyle, with its distinctive and carefully parted and plaited locks, implying a level of cultural construction and humanisation.

Unsurprisingly, the biblical hero Samson, with his long hair divided into seven locks, and with his lion-slaying feats, is often likened to the Mesopotamian 'hairy hero man' (Judges 14.5–6, 16.19; see Mobley 2006) but perhaps more appropriate for this comparison is the hero Enkidu, a principal figure in the Epic of Gilgamesh (Wolff 1969). Enkidu is a foundling in the wilderness. He was raised by a gazelle who acted as his mother and a wild ass who performed the role of surrogate father so that Enkidu, naked and hairy, was raised with the four-legged animals of the wilderness and acts as their guardian and protector. In appearance, habit and sentiment, Enkidu is clearly more animal than human, a fact reflected in several of his epithets – 'wild ass', 'mule' and 'panther.'

Following his sexual intercourse with the prostitute Shamhat, Enkidu begins a process whereby he loses his animal identity and becomes increasingly more human; as he does so, he shifts his locale from steppe to shepherd's hut to city and as he progresses on this journey he learns the basics of what it is to behave like a man – he eats bread, drinks beer and sleeps indoors. His final gesture of acculturation is to shave his hair, anoint his body with perfumed oil and put on clothing. From that moment, animals become his prey, the source of sport and prowess. For their part, the wild animals recognise through smell and sight the fact that their one-time protector has morphed into something they now think of as dangerous and predatory (see comments by George 2003).

3. Adam and Eve and the animals: rulership or ecological bliss?

Hebrew bible; Genesis 1.24–30; 2.4–25

And God said, 'Let the land produce living creatures according to their kinds: the livestock, the creatures that move along the ground, and the wild animals, each according to its kind.' And it was so. God made the wild animals according to their kinds, the livestock according to their kinds, and all the creatures that move along the ground according to their kinds. And God saw that it was good.

Then God said, 'Let us make mankind in our image, in our likeness, so that they may rule over the fish in the sea and the birds in the sky, over the livestock and all the wild animals, and over all the creatures that move along the ground.'

So God created mankind in his own image,
in the image of God he created them;
male and female he created them.

God blessed them and said to them, 'Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.'

Then God said, 'I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. And to all the beasts of the earth and all the birds in the sky and all the creatures that move along the ground – everything that has the breath of life in it – I give every green plant for food.' And it was so.

This is the account of the heavens and the earth when they were created, when the Lord God made the earth and the heavens.

Now no shrub had yet appeared on the earth and no plant had yet sprung up, for the Lord God had not sent rain on the earth and there was no one to work the ground, but streams came up from the earth and watered the whole surface of the ground. Then the Lord God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

Now the Lord God had planted a garden in the east, in Eden; and there he put the man he had formed. The Lord God made all kinds of trees grow out of the ground – trees that were pleasing to the eye and good for food. In the middle of the garden were the tree of life and the tree of the knowledge of good and evil.

A river watering the garden flowed from Eden; from there it was separated into four headwaters . . . The Lord God took the man and put him in the Garden of Eden to work it and take care of it. And the Lord God commanded the man, 'You are free to eat from any tree in the garden; but you must not eat from the tree of the knowledge of good and evil, for when you eat from it you will certainly die.'

The Lord God said, 'It is not good for the man to be alone. I will make a helper suitable for him.'

Now the Lord God had formed out of the ground all the wild animals and all the birds in the sky. He brought them to the man to see what he would name them; and whatever the man called each living creature, that was its name. So the man gave names to all the livestock, the birds in the sky and all the wild animals.

But for Adam no suitable helper was found. So the Lord God caused the man to fall into a deep sleep; and while he was sleeping, he took one of the man's ribs and then

closed up the place with flesh. Then the Lord God made a woman from the rib he had taken out of the man, and he brought her to the man.

The man said,
'This is now bone of my bones
and flesh of my flesh;
she shall be called "woman,"
for she was taken out of man.'

That is why a man leaves his father and mother and is united to his wife, and they become one flesh.

Adam and his wife were both naked, and they felt no shame.

COMMENT: It is commonly accepted that Genesis 1 and 2 come from two very different traditions and were composed at separate times (for solid commentaries on the creation accounts see especially Gunkel 1997 and Westermann 1987; for interesting thematic studies see Day 2013 and Zevit 2013). Genesis 1, an abstract and priestly take on the creation story, which takes place over six days, is later than Genesis 2 which preserves some very ancient materials about a god – Yahweh – who takes on human form and walks and talks in the garden he created; this god creates man from the earth and breathes life into him whereas the god of Genesis 1 thinks and speaks man into being.

Only in Genesis 1 does God give man – Adam (a Hebrew word which is both a personal name and a noun, 'mankind') – dominion over every living thing: all wild and domestic animals, sea creatures and birds. Commentators differ as to the meaning of the word 'rule' which, it is suggested, suggests stewardship but not dominance, and perhaps some kind of ambiguity was in the mind of the priestly scribe who wrote the passage. Nor is Genesis 1 alone in assigning this dominance of species: in Greek literature, for instance, Zeus gives Hermes a similar right to rule over animals:

'Take these gifts, son of Maia, and watch over the horned oxen of the fields, the horses and hardworking mules.' So spoke [Apollo]; and father Zeus himself gave confirmation to his words from the heavens, giving noble Hermes the guardianship over all birds of omen, over fierce lions and sharp-tusked boar, and over dogs and all the flocks which the wide earth bears, and over all cattle.

(Hom. Herm. 568–72)

Here, however, the lordship of nature is retained within the divine realm; in Genesis 1 God hands nature over to human rule completely. Yet there is a caveat: man is clearly not intended to kill or eat the animals nor are animals to turn on one another and kill and devour each other. Genesis 1 envisages a world of ecological bliss, albeit a place which is hierarchically controlled. This notion stands in sharp contrast to other Near Eastern conceptions of the human–animal relationship. A Sumerian creation text reads:

The lord Enki organized the marshes, made grow the reeds there young and old, brought fish and birds into the marshes, swamps and lakes, filled the steppe with breathing creatures as [mankind's] food and drink, charged them with supplying the abundance of the gods . . . He filled the cane-brake and marsh with fish and bird and assigned them to their stations.

(Clifford 1994: 39)

In Egypt, the *Instruction of Merikare* offers a similar image:

Well-tended is mankind – god’s cattle.
He made sky and earth for their sake. . .
He made breath for their noses to live.
They are his images, who come from his body. . .
He made for the plants and cattle,
Fowl and fish to feed them. . .
When they weep, he hears. . .
For god knows every name.

(Lichtheim 1973: 106)

At first glance Genesis 2 suggests equality amongst the species, since man (but not woman) and all living creatures are created out of the earth and are given life through the breath of Yahweh entering into them. But Adam is singled out for a special task: he is to name the animals. Names were not created randomly in the ancient Near East since a name defined the character of the creature which bore it. The giving of a name, therefore, is an act of authority, since it decrees the destiny of the name-bearer. Adam’s act of assigning names to the animal kingdom is the first step in separating man from beast and for setting human authority over nature (Hollander 1995). Given that only man is created in God’s image, Adam comes to realise that animals are not his social equal and that they are, by the will of God, inferior to him (see further Perlo 2009; Simkins 1994; George and George 2014).

4. Noah’s new covenant: permission to eat meat

Hebrew bible, Genesis 8.15–22, 9.1–15

Then God said to Noah, ‘Come out of the ark, you and your wife and your sons and their wives. Bring out every kind of living creature that is with you – the birds, the animals, and all the creatures that move along the ground – so they can multiply on the earth and be fruitful and increase in number on it.’

So Noah came out, together with his sons and his wife and his sons’ wives. All the animals and all the creatures that move along the ground and all the birds – everything that moves on land – came out of the ark, one kind after another.

Then Noah built an altar to the Lord and, taking some of all the clean animals and clean birds, he sacrificed burnt offerings on it. The Lord smelled the pleasing aroma and said in his heart: ‘Never again will I curse the ground because of humans, even though every inclination of the human heart is evil from childhood. And never again will I destroy all living creatures, as I have done.

‘As long as the earth endures,
seedtime and harvest,
cold and heat,
summer and winter,
day and night
will never cease.’

Then God blessed Noah and his sons, saying to them, ‘Be fruitful and increase in number and fill the earth. The fear and dread of you will fall on all the beasts of the earth, and on all the birds in the sky, on every creature that moves along the ground, and on

all the fish in the sea; they are given into your hands. Everything that lives and moves about will be food for you. Just as I gave you the green plants, I now give you everything.

‘But you must not eat meat that has its lifeblood still in it. And for your lifeblood I will surely demand an accounting. I will demand an accounting from every animal. And from each human being, too, I will demand an accounting for the life of another human being.

‘Whoever sheds human blood,
by humans shall their blood be shed;
for in the image of God
has God made mankind.

As for you, be fruitful and increase in number; multiply on the earth and increase upon it.’

Then God said to Noah and to his sons with him: ‘I now establish my covenant with you and with your descendants after you and with every living creature that was with you – the birds, the livestock and all the wild animals, all those that came out of the ark with you – every living creature on earth. I establish my covenant with you: Never again will all life be destroyed by the waters of a flood; never again will there be a flood to destroy the earth.’

And God said, ‘This is the sign of the covenant I am making between me and you and every living creature with you, a covenant for all generations to come: I have set my rainbow in the clouds, and it will be the sign of the covenant between me and the earth. Whenever I bring clouds over the earth and the rainbow appears in the clouds, I will remember my covenant between me and you and all living creatures of every kind. Never again will the waters become a flood to destroy all life.’

COMMENT: After the Flood, the power man has over animals is intensified in a new doctrine or covenant passed from Yahweh to Noah. Mankind is now permitted to kill animals and to eat them too, although a distinction between clean and unclean beasts is already being claimed in this pre-Leviticus world (which leads many scholars to believe that elements of the Flood story were reworked by priestly scribes in the Exilic or post-Exilic periods to bring it in line with the focus on Jewish food legislation). In Jewish law the unlawful killing of animals could have consequences so that, ‘Anyone who takes the life of someone’s animal must make restitution – life for life’ (Leviticus 24. 18). However, the laws of Exodus (21. 28–32) note:

If a bull gores a man or woman to death, the bull is to be stoned to death, and its meat must not be eaten. But the owner of the bull will not be held responsible. If, however, the bull has had the habit of goring and the owner has been warned but has not kept it penned up and it kills a man or woman, the bull is to be stoned and its owner also is to be put to death. However, if payment is demanded, the owner may redeem his life by the payment of whatever is demanded. This law also applies if the bull gores a son or daughter. If the bull gores a male or female slave, the owner must pay thirty shekels of silver to the master of the slave, and the bull is to be stoned to death.

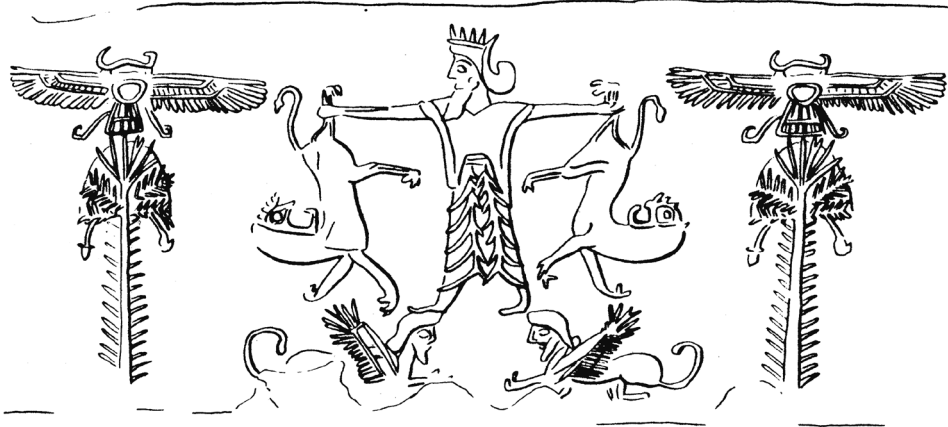
Even the unresolved murder of a human can be redressed through the act of breaking a heifer’s neck. In other words, there is a sharp polarity identified in these texts between the value of the life of a human and the life of an animal. The vegan world of Eden gives way to one in which meat-eating is encouraged. This is not, however, a comment on the development of civilisation (see Genesis 4), but a display of Yahweh’s blessing to mankind and it should be recalled that in

antiquity, the eating of meat was not a daily affair: most meat was accessed only after some kind of cultic ritual.

God's comment to mankind that 'fear and dread of you will fall on all the [animals]' is the first in a series of Hebrew texts in which wild animals are distanced from humans. A similar notion is found in Mesopotamian thought (see above, no. 2), but this is balanced by numerous other texts in which humans are in fear of the dangers of wild beasts (see Batto 1991). Indeed, in some Hebrew texts, animals become – to a greater or lesser degree – Yahweh's avenging agents for the iniquities of mankind: 'I will send wild animals against you, and they will rob you of your children, destroy your cattle and make you so few in number that your roads will be deserted' (Leviticus 26. 22).

5. Master of Animals

*Achaemenid cylinder seal, Iran, c. 500 BCE
(New York, Metropolitan Museum of Art 56.157.2)*



COMMENT: The separation between the human and the animal, the civilised and the wild, was deep set in the ancient mind. Animals could be tamed and made useful, or were enemies which could be overcome. This latter notion is expressed in a very popular iconographic series drawn from throughout the Near East and the Mediterranean known as the 'Master (or Mistress) of Animals' motif (Johnson 1988). A god, goddess, hero or hero-king (as shown on the Achaemenid Persian seal represented here; see further discussion by Garrison and Root 2001) is represented grasping the tails, throats or hind-legs of animals which flank him or her on two sides. Most typically, a caprid (wild goat, antelope, ibex, stag) is represented in duplicate, but lions, horses, scorpions and ostriches are also common, together with a host of hybrid monsters (see Keel and Uehlinger 1998; Arnold and Counts 2010).

An alternative image of a human placing his foot upon a weaker animal is also to be found (see Keel 1978: 58–9). A Hebrew Psalm (8. 4–8) employs this vivid image to stress humankind's uniqueness in the order of creation, their place in the hierarchy of Yahweh's cosmos and their lordship over, and distance from, the animals:

What is mankind that you are mindful of them,
human beings that you care for them?
You have made them a little lower than the angels
and crowned them with glory and honour.
You made them rulers over the works of your hands;
you put everything under their feet:
all flocks and herds,
and the animals of the wild,
the birds in the sky,
and the fish in the sea,
all that swim the paths of the seas.

The image of mankind with ‘everything under their feet’ is, however, not necessarily an image of dominance. The concept stressed here is that Yahweh created humanity as a guardian of nature. The idea was current throughout the Near East: a ruler from Anatolia, c. 700 BCE, named Azatiwata therefore proclaims that he brought peace and order to his realm and that his guardianship was successful because ‘I placed them under my feet’ (Halla and Younger 2003: (2) 21).

In the iconography, the connection between the deity/hero and the grasped animal is clearly important and it is possible that the creature served as a symbol of the deity’s presence. As Brian Doak (2014: 202) notes,

in this iconography . . . the deity and the animal cannot be separated; the deity’s association with the animal is a picture of the cosmos, that is, of the ongoing status of divine control and the divine attributes needed to create that control.

6. Man the monster: cruelty towards animals

Egyptian animal fable, Leiden Demotic Papyrus I 384 (after Lichtheim 1980: 158–9)

There was a [lion on the] mountain who was mighty in strength and was good at hunting. [The small game of the] mountains knew fear of him and terror of him. One day it happened that he met a panther whose fur was stripped, whose skin was torn, who was half dead and half alive [because of his] wounds. The lion said: ‘How did you get in to this condition? Who scraped your fur and stripped your skin?’ The panther [said to him]: ‘It was man.’ The lion said to him: ‘Man, what is that?’ The panther said to him: ‘There is no one more cunning than man. May you not fall into the hand of man!’ The lion became enraged against man. He ran away from the panther in order to search for [man]. The lion encountered a team yoked [. . .] so that one bit was in the mouth of the horse, the other bit [in the] mouth of the donkey. The lion said to them: ‘Who is he who has done this to you?’ They said: ‘It is man, our master.’ He said to them: ‘Is man mightier than you?’ They said: ‘Our lord, there is no one more cunning than man. May you not fall into the hand of man.’ The lion became enraged against man; he ran away from them.

The same happened to him with an ox and a cow, whose horns were clipped, whose noses were pierced, and whose heads were roped. He questioned them; they told him the same. The same happened with a bear whose claws had been removed and whose teeth had been pulled. He asked him, saying: ‘Is man stronger than you?’ He said: ‘That

is the truth. I had a servant who prepared my food. He said to me: "Truly, your claws stick out from your flesh; you cannot pick up food with them. Your teeth protrude; they do not let the food reach your mouth. Release me, and I will cause you to pick up twice as much food!" When I released him, he removed my claws and my teeth. I have no food and no strength without them! He strewed sand in my eyes and ran away from me. The lion became enraged against man. He ran away from the bear in order to search for man.

He met a lion who was [tied to] a tree of the desert, the trunk being closed over his paw, and he was very distressed because he could not run away. The lion said to him: 'How did you get into this evil condition? Who is he who did this to you?' The lion said to him: 'It is man! Beware, do not trust him! Man is bad. Do not fall in to the hand of man!' I had said to him: 'What work do you do?' He said to me: 'My work is giving old age. I can make for you an amulet, so that you will never die. Come, I will cut a tree for you and place it on your body as an amulet, so that you will never die.' I went with him. He came to this tree of the mountain, sawed it, and said to me: 'Stretch out your paw.' I put my paw between the trunk; he shut its mouth on it. When he had ascertained of me that my paw was fastened, so that I could not run after him, he strewed sand into my eyes and ran away from me. Then the lion laughed and said: 'Man, if you should fall into my hand, I shall give you the pain that you inflicted on my companions on the mountain!'

COMMENT: The fable of *The Lion in Search of Man* is part of a much longer text concerning the mythology of the Egyptian goddess Tefnut and the Eye of the Sun; the fable climaxes with the lively story of the lion and the mouse (see LION no. 9), but the opening of the tale cited here is the most remarkable section of the whole piece. It is unique in Egyptian literature as the lone moment when 'the Egyptian stepped out of himself, looked at man, and found him to be bad' (Lichtheim 1980: 157). The text is an upsetting catalogue of crimes committed to both wild and domesticated animals, much of it wanton cruelty. The effectiveness of the story comes from the fact that each of the animals, speaking with a human voice, is a dignified and rounded character whereas man is spoken of only in the abstract and acts more bestially than the wildest animal. Of course, evidence exists to show that Egyptians could be vigilant in their protection of animals, and many individuals who worked closely alongside livestock are shown to be caring and even sentimental towards them (see for instance COW no. 8b; DONKEY no. 9; HORSE no. 4b). Nevertheless, the imagery employed in the fable is hard-hitting and probably paints a very accurate picture of the inhuman treatment of animals in the ancient world.

7. Bestiality

a) Hittite Laws §198, 200 c. 1650–1500 BCE (Hoffner 1997)

If anyone has sexual relations with a pig (or) a dog, he shall die. He shall bring him to the palace gate (i.e., the royal court). The king may have them (i.e., the human and the animal) killed or he may spare them, but he (the human) shall not approach the king. If an ox leaps on a man (in sexual excitement), the ox shall die; the man shall not die. They shall substitute one sheep in the place of the man and put it to death. If a pig leaps on a man (in sexual excitement), it is not an offence. . .

If a man has sexual relations with either a horse or a mule, it is not an offence.

b) Hebrew bible, Exodus 22.19; Leviticus 18.23

Anyone who has sexual relations with an animal is to be put to death.

Do not have sexual relations with an animal and defile yourself with it. A woman must not present herself to an animal to have sexual relations with it; that is a perversion.

COMMENT: In contemporary usage, the term ‘bestiality’ refers to sexual acts between human beings and animals, and while to some extent the word has been supplanted in modern studies by the terms ‘zoosexuality’ and ‘zooerasty’, ‘bestiality’ has a more condemnatory tone since it has a pejorative judgement built into it, a way of describing human beings who have ‘the instinct of beasts’. But is this inherent in the thought processes of the Near East?

Perlo (2009: 34) suggests that ‘if people had not lived in such propinquity to animals, the authors of Exodus and Leviticus would not have felt a need to warn against sexual intimacy with them’, and Boer’s study of the Hittite laws suggests the same thing: ‘We can assume . . . that among the Hittites sex between human beings, cows, sheep, pigs, and dogs did take place, so much so that one needed laws to indicate that these acts were taboo’ (2012: 136). A Mesopotamian text suggests that sexual fantasies could fixate on animals too: ‘Let a horse [make love to me (?)]. Let his penis be a stick of *martu*-wood (?). [Let it strike the] anus of the woman. . .’

The Hittite laws clearly state that sex with a sheep, cow, dog or pig was taboo, although a concession was made if a pig was to mount a man – it must be remembered that men alone are the addressees of the Hittite law code and that therefore the question of penetration is brought into question. The law focusing on the ox, however, is more complex, for although it is a crime for an ox to mount a man, the man in question is not to be put to death (the deviant ox is to be killed) but a sheep is to be killed in his place. Boer notes that in an agricultural society, in which there is an everyday possibility that an ox or a pig might become sexually aroused and try to mount a man as he went about his routine labour, it would be illogical to kill a man every time this happened.

According to the Hittite laws, however, sex between men, horses and mules was sanctioned. Collins tries to explain this oddity by suggesting that it demonstrates the particular status of equids among domestic animals (2007: 121); because, she argues, horses and donkeys were not eaten and lived outside the immediate environment of humans, they were less likely to spread pollution. Boer suggests instead that Hittite men on campaign could and did develop sexual relationships with their horses and their mules: ‘A Hittite saying that should have been: a horse for the road and a mule and a wife at home: what more can a man want?’ (Boer 2012: 139). He also notes a strange qualification in regard to the laws focusing on the horse and mule: any man who penetrated an equid was not permitted to approach the king or to take holy vows and become a priest (Hoffner 1997: 237). On a surface reading, this is done to avoid polluting the king or the clergy, but the reading is in no way certain and the understanding of Hittite hippophilia remains complex (on the Hebrew bestiality laws see Boer 2015: 73–4).

8. Gelded human males: eunuchs

Xenophon, Cyropaedia VII. 58–65

[Cyrus] observed that since eunuchs were deprived of all [the pleasures of family life] they would be likely to be most loyal to those who were able to make them rich, to aid them if they suffered any wrong and to offer them honours; and he thought that no other man could exceed him in generosity. As well as this, since eunuchs are held

in contempt by all men, they need a master who can protect them; for there is no man who would not seek to take advantage of a eunuch in all matters, unless a stronger power were there to restrain him, whereas nothing prevents a eunuch being foremost in loyalty to his master.

Furthermore, Cyrus did not believe the general opinion that eunuchs are weak, drawing on the example of other animals. When spirited stallions are gelded, for instance, they stop biting and being difficult to handle, but they do not become any less fit for war, and likewise when bulls are castrated they lose their intractability and wilfulness, but not their strength and capacity for work. And when hounds are castrated, they stop running away from their master, but are none the worse for watching in the hunt. And so it is with men: the spirit of eunuchs becomes gentler, but they are just as reliable in their duties, whether as cavalrymen or pikemen, and no less keen to distinguish themselves. It is plain that both in warfare and hunting they retain their competitive spirit. They have also given ample proof of their trustworthiness when a master suffers misfortune, for no men have acted with greater fidelity than eunuchs when their masters suffer reverses. And if, as people think, their bodily strength is lacking, cold iron is a great equaliser on the battlefield. With all these judgements in mind, Cyrus appointed eunuchs to every position in his personal service, from the doorkeepers upward.

COMMENT: Much debate surrounds the historicity of eunuchs in the ancient Near East. These (supposedly) castrated males served at royal courts as officials, bureaucrats and attendants, while in Assyria they also seem to have been military personnel. If these individuals were indeed castrati, then as a kind of 'third sex' they were able to negotiate the permeable barriers of the royal courts in their crucial capacities as messengers and trusted body-servants (Llewellyn-Jones 2002). The Akkadian term *ša rēši* (literally, 'of the head') appears to translate as 'eunuch', although this has been open to considerable debate among Assyriologists and scholars of other Near Eastern civilisations. Tougher in his major study of eunuchism in antiquity has wisely warned that 'being too sceptical can be as dangerous as being gullible' (Tougher 2008: 20) and a wider knowledge of eunuch history shows that they were a hallmark of royal courts (and noble houses) across time and place.

The castration of human males has several subsequent effects upon the body. Castration before puberty leads to the curbing of testosterone development and hence to the retention of a high voice, lack of hair and fleshiness. Post-pubertal castration, however, has no effect upon the voice, but does limit the growth of facial hair and the individual tends to become fat and bulky; these features are apparent in standard Assyrian images of court eunuchs.

According to Greek reports, Near Eastern rulers valued eunuchs for their honesty and loyalty, since the process of castration made men, like gelded horses and dogs, docile and more malleable (Hdt. VIII.105) and Xenophon unambiguously affirms that Cyrus the Great had first introduced eunuchs into his guard for just this reason – although in reality this cannot be proved. Herodotus recounts an interesting tale of how a Greek-speaking youth, Hermotimus of Pedasa, was captured and sold to the slave-dealer Panionius who specialised in trading beautiful boys to elite customers in Asia Minor, having first castrated them. Hermotimus subsequently found himself at the Persian court where he quickly caught the eye and gained the favour of Xerxes who charged him with the privileged and trusted task of tutoring the children of the royal harem (Hdt. VIII.103–5). Herodotus further states (III.92) that Babylon was required to send the Great King an annual tribute of 500 boys to be castrated and turned into eunuchs and by implication it is possible that the five boys he mentions being sent every three years from Ethiopia and the 100 boys sent by the Colchians to court as tribute were castrati also (Hdt. III.97). He also points out that at the

suppression of the Ionian revolt, the Persians emasculated the prettiest boys and shipped them off to Iran (VI.9, 32). It is clear that Herodotus found the practice of castration abhorrent and the creation of eunuchs perverse. Part of his hostility to the concept of eunuchism might be found in the idea the eunuchs seem to inhabit not only a liminal gender identity, but a liminal species identity too: eunuchs are bestial, castrated and traded like animals and even adored like beloved pets (on human pets, see below).

9. Man as food

Neo-Babylonian cuneiform tablet, c. 1000–625 BCE (after Pritchard 1969: 100–1)

After Anu had created heaven,
Heaven had created the earth,
The earth had created the rivers,
The rivers had created the marsh,
And the marsh had created the worm—
The worm went, weeping, before Shamash,
His tears flowing before Ea:
'What will you give me for food?
What will you give me to suck on?'
'I will give you the ripe fig and the apricot'.
'What good are the ripe fig and the apricot?
Lift me up, and assign me to the teeth and the gums!
I will suck the blood of the tooth,
and I will gnaw its roots at the gum!'
Because you have said this, O worm,
May Ea strike you with the might of his hand!

COMMENT: In antiquity, humans were frequently eaten by wild animals; even after death their corpses could be ingested by wildlife. Life was not always safe for humans – but attack, pain and suffering did not necessarily come from only the carnivores or from attacks by other angry or frightened quadrupeds. In the ancient Near East, for instance, it was widely thought that toothache was caused by a worm which lived within the diseased tooth. In fact, the worm, forgotten by the gods as the lowest form of creation, decides for himself that he will abide within the jaws of men, feeding on the teeth and gums of humankind. This belief originated in Mesopotamia but was shared by many ancient (and later) cultures.

The worm supposedly bored a hole through a tooth, hiding beneath the surface. It caused the toothache by moving around looking for food, and the pain subsided once the worm rested. Treatments for the tooth worm varied from fumigation and rinsing the mouth with hot water to the killing of a mouse and rubbing it on the aching tooth.

10. Animals as humans

*Detail of a Ramesside papyrus with satirical vignettes,
Egypt, XIX or XX Dynasty, c. 1250–1150 BCE (London,
British Museum EA10016,1)*



COMMENT: There are several surviving papyri which show the inversion of world order where animals act against their natural instincts and become humanised in their behaviour (Houlihan 2001: 61–71). This popular genre indulges the Egyptian love of the silly and quirky, but also makes an interesting comment on the conception of the permeable barrier which divided human behaviour from animal instinct.

The finest example of the animal satire is a long painted papyrus in the British Museum, a detail of which is shown here. A lion sits on a low stool opposite a gazelle; between them is a low table on which sits a board game, probably '*sener*'. The pair are depicted in the manner of an elite human couple, although both grasp the playing pieces with obvious difficulty (the lion also holds a die made from an animal bone). Of course, the board game also highlights the animalistic nature lying just beneath the civilised behaviour of the lion and the gazelle, for the hunter pits his wits against his potential prey. Judging from the fragmentary closing section of the papyrus, it seems the lion wins the game and claims his victory in the bedroom: the gazelle is shown lying on her back, in human fashion, on the bed while the lion prepares to have intercourse with her.

11. Are humans animals?

Aristotle Parts of Animals 639a15–b3

The first decision which must be made is whether to treat each species separately, thus describing the nature of man or lion or ox or any other animal one at a time, or whether to set out a general survey of those characteristics which are common to all. For many processes such as sleep, respiration, growth, decline and death are the same in all creatures, even if the creatures themselves are unlike, and all other similar states and conditions; it would be unclear and confusing to describe them all at this point. It is plain that if we describe each species in turn we would end up saying the same things

many times over, because each of the functions described above is present in horses and dogs and men, so that if one were to describe the characteristics of each separately it would necessarily lead to much repetition, because the same processes, while present in different species, do not differ in themselves. On the other hand there are some processes which are called by the same name, but take different forms according to the species, such as movement: this does not always take the same form, since flying is a different kind of movement compared to swimming, as are walking and creeping.

656a 4–13

But those animals which possess both life and awareness are more varied in their appearance, some more markedly than others, and the most complex creatures are those which have a capacity not just for existence, but for well-being. This is characteristic of humankind; humans alone of all the animals of which we know (or at least most of all) have a share of the divine. For this reason, and because our anatomical knowledge of the external parts of humans is the most extensive, it is appropriate to discuss humans first. To begin with, it is only among humans that the natural parts are organised in accordance with nature, for the upper part of the human body is upright in form: man is the only animal who holds himself upright.

COMMENT: Early Greek philosophy was open to the idea of the human as simply one animal among many, but the opposing view, that humans are significantly different and not to be counted as animals, took influential form (perhaps unexpectedly) in the work of Aristotle. One would have imagined that Aristotle's work on comparative anatomy and biology would naturally lead to the understanding that humans are structurally no different from other mammals, and should therefore be classed alongside other warm-blooded animals, and this seems to be the implication of the first passage in which '*anthrôpos*' is presented as a species similar to 'lion', 'horse' and so forth. But further on in the same work Aristotle draws a distinction between humans and other animals by appeal to intangible spiritual and intellectual characteristics, and to humans' upright posture. This privileging of humanity in fact underlies all his anatomical discussions, as he tends to introduce each topic by placing human characteristics first as the ideal model, and comparing animal forms to them.

Once the human/animal opposition was established it was rare for later philosophers to depart from it, and by the time of the Stoics it had become entrenched, though the precise qualities on which human difference and superiority was supposed to rest varied: for some the capacity for speech was key, for others reason or laughter, and for yet others the use of hands (Renehan 1981). These philosophical views then proved very consonant with Christian beliefs, in which humans alone were created in the image of God, and the animal kingdom subordinated to them (Gilhus 2006: 161–82).

12. Human pets

Suetonius Augustus 83

To divert his mind he [the emperor Augustus] would sometimes go angling, and sometimes play at knucklebones or marbles or nuts with little boys, whom he made a point of seeking out for their attractive appearance or childish chatter, particularly those from Mauretania or Syria; for he was repelled by dwarves and the deformed and such like, judging them to be unnatural and ill-omened.

Cassius Dio Roman History XLVIII.44.3

[At the marriage of Livia and Augustus] it was actually her former husband who gave her in marriage, as though he was her father. And at their wedding dinner the following incident occurred: one of Livia's prattling boys, the kind which women keep in their household, naked for the most part, for entertainment, seeing Livia sitting on one side with Caesar, and Nero (her former husband) reclining on the other with another man, went up to her and said, 'What are you doing there, mistress? Your husband,' and he pointed at him, 'is sitting over there.'

Petronius Satyricon 64

Then Trimalchio, after pretending to blow a trumpet, looked about for his pet boy, whom he called Croesus. He was a watery-eyed boy with very bad teeth, who was playing with a grossly fat black puppy, wrapping a green scarf around it and putting some half-eaten bread onto a couch and forcing the puppy to eat it, though it sicked it up again. Thus reminded of his duties, Trimalchio called for Scylax, 'the guard of house and family' to be brought in. Straight away a huge dog was brought in on a chain, and lay down in front of the table at a kick from the porter. Trimalchio threw the dog some white bread, saying, 'No one in my household loves me more than Scylax.' The boy, annoyed at hearing the dog praised so highly, put his puppy on the ground and encouraged it to attack the guard dog. Scylax, true to his nature, filled the room with the most dreadful barking and almost tore Croesus' little Margarita to pieces. To add to the uproar of the dogfight, one of the candelabra on the table was knocked over, broke all the glasses and showered all the guests with scalding oil. Trimalchio, to show that he was not upset by the accident, kissed the boy and told him to climb up on his back. The boy did so, riding about as though on a horse and slapping Trimalchio's shoulders, to a chant of '*Bucca, bucca*, how many fingers?'

COMMENT: *Delicia*-children – slaves who were chosen when young to be the pets of the rich – were a notable phenomenon in Rome, and are shown by our sources to have been common in the households of the rich as a form of conspicuous consumption: Suetonius indicates in the passage above that there was a trade in such children from different parts of the empire. The owners' purpose in acquiring a *delicia*-child varied considerably: in some cases a child was adopted as a substitute son or daughter and brought up with parental care (Laes 2010; Watson 1992), while at the other extreme a child could be acquired for straightforward sexual exploitation. The sources above, however, describe young children kept in the households of the wealthy for their entertainment value – their playfulness, affection and lack of worldly concerns: both Augustus and Trimalchio enjoy playing childish games with their pets, while Dio suggests that rich women treated them in an overtly sexualised way, keeping them naked, and with a role akin to the adult fool or jester. Many sources dwell on the delights of the company of children as pets – they are affectionate, mischievous, sincere and pretty – and a considerable number of monuments to their death exist, with heartfelt epitaphs (Laes 2003). Nevertheless, the status of the *delicia*-child is disturbing to modern sensibilities: all human slaves had a status in law equal to domestic animals (Bradley 2000), and the depiction of Trimalchio's pets, human and canine together, both equally subject to whim and ill-treatment, is troubling. Obvious questions arise for us: what was the experience of a small child removed from his or her family and placed as a pet, and what happened to the pretty and entertaining child when he or she grew up? We hear of few

who retained favoured status into adulthood; in a wealthy household a slave child could simply be sent to another occupation, though one wonders whether a childhood as an indulged pet created an adolescent suitable for slave work. Some were presumably passed on to other owners or sold into prostitution; like animal pets, they could easily be replaced with a younger version.

Adult human pets also existed in Rome, the dwarves and hunchbacks referred to by Suetonius: we hear of troupes of entertainers or individual jester types, but as adults these individuals would have retained some level of autonomy, if no legal rights (Garland 2010: 32–3, 45–50)

13. Humans versus nature

Joshua the Stylite, Chronicle LXXXV

In this same year, after the fighting had ceased, the wild beasts became very ferocious against us. In consequence of the great number of dead bodies of those who had fallen in these battles, they had acquired a taste for eating human flesh; and when the bodies of the slain rotted and disappeared, the wild beasts entered the villages and carried off children and devoured them. They also fell upon single men on the roads and killed them. At last the people became so afraid that, at the time of threshing, not a man in the whole district would pass the night in his threshing-floor without a hut (to shelter him), for fear of the beasts of prey. But by the help of our Lord, who is always careful for us and delivers us from all trials by His mercy, some of them fell by the hands of the villagers, who stabbed them, and sent their dead carcasses to Edessa; and others were caught by huntsmen, who bound them and brought them (thither) alive, so that every one saw them and praised God, who has said, “The fear of you and the dread of you I will put upon every beast of the earth.” For although, because of our sins, war and famine and pestilence and captivity and noxious beasts and other chastisements, written and unwritten, were sent upon us, yet by His grace we have been delivered from them all.

COMMENT: Joshua the Stylite wrote his *Chronicle* in Syria in 507 CE to give an account of the war between Rome and Persia in 502–6. This extract (trans. Wright 1882) describes the effect of the war on the city of Edessa and brings home the immediacy of the threat to humans from predatory animals in classical times. While creatures such as wolves and jackals were permanently attracted to the fringes of human settlements by the potential prey of domestic animals, or by human refuse, this passage implies that a breakdown of human society would mean greater incursions by wild animals. The balance of power between humans and animals in antiquity can be hard for a modern audience to grasp: in the pages of this book are stories of humans killed by lions, wolves, bears and sharks, and even their own household dogs. Both large predators and small parasites were difficult to protect oneself against, and the impression given by our sources is that human habitations were islands within the wild, needing a conscious effort to keep nature at bay. In this context the gruesome spectacle of animals killed in the Roman arena becomes easier to understand: human dominance over the animal world, especially large and fierce animals, was not guaranteed, and seeing it as spectacle in the city was an expression of an aspiration everyone shared.

Bibliography

- B. Arnold and D. Counts, *The Master of Animals in Old World Iconography* (Budapest 2010).
B. Batto, ‘Paradise re-examined’, in K.L. Younger, W.W. Hallo and B. Batto (eds), *The Biblical Canon in Comparative Perspective: scripture in context IV* (New York 1991), 33–66.
R. Boer, *The Earthly Nature of the Bible* (London 2012).

- R. Boer, 'From horse kissing to beastly emissions. Paraphilias in the ancient Near East', in M. Masterson, N.S. Rabinowitz and J. Robson (eds), *Sex in Antiquity. Exploring Gender and Sexuality in the Ancient World* (London 2015), 67–79.
- D.L. Bomgardner, 'The trade in wild beasts for Roman spectacles: a green perspective', *Anthropozoologica* 16 (1992), 161–6.
- K.R. Bradley, 'Animalising the slave: the truth of fiction', *JRS* 90 (2000), 110–25.
- R. Clifford, *Creation Accounts in the Ancient Near East and in the Bible* (Atlanta 1994).
- B.J. Collins, *The Hittites and Their World* (Atlanta 2007).
- W.P. Cunningham and B.W. Saigo, *Environmental Science: a global concern* (New York 1999).
- J. Day, *From Creation to Babel: Studies in Genesis 1–11* (London 2013).
- B.R. Doak, *Consider Leviathan. Narratives of Nature and Self in Job* (Minneapolis 2014).
- J. Donald Hughes, *Environmental Problems of the Greeks and Romans: ecology in the ancient Mediterranean* (ed², Baltimore 2014).
- R. Garland, *The Eye of the Beholder: deformity and disability in the Graeco-Roman world* (ed.², London 2010).
- M. Garrison and M.C. Root, *Seals on the Persepolis Fortification Tablets: images of heroic encounter* (2 vols) (Chicago 2001).
- A. George and E. George, *The Mythology of Eden* (Lanham 2014).
- A.R. George, *The Epic of Gilgamesh. A New Translation* (London 1999).
- A.R. George, *The Babylonian Gilgamesh Epic: introduction, critical edition and Cuneiform texts* (2 vols) (Oxford 2003).
- I.S. Gilhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
- H. Gunkel, *Genesis* (Macon 1997).
- W.W. Hallo and K.L. Younger, *The Context of Scripture* (3 vols) (Leiden 2003).
- H.A. Hoffner, *The Laws of the Hittites. A Critical Edition* (Leiden 1997).
- J. Hollander, 'I named them as they passed: kinds of animals and humankind', *Social Research* 62.3 (1995), 457–76.
- P.F. Houlihan, *Wit and Humour in Ancient Egypt* (London 2001).
- B. Johnson, *Lady of the Beasts* (San Francisco 1988).
- O. Keel, *The Symbolism of the Biblical World. Ancient Near Eastern Iconography and the Book of Psalms* (Winona Lake 1978).
- O. Keel and C. Uehlinger, *Gods, Goddesses, and Images of God in Ancient Israel* (Minneapolis 1998).
- C. Laes, 'Delicia-children revisited: the evidence of Statius' *Silvae*', in V. Dasen and T. Späth (eds), *Children, Memory and Family Identity in Roman Culture* (Oxford 2010), 245–72.
- C. Laes, 'Desperately different?: delicia-children in the Roman household', in D.L. Balch and C. Osiek, *Early Christian Families in Context: an interdisciplinary dialogue* (2003), 298–326.
- M. Lichtheim, *Ancient Egyptian Literature: Volume I. The Old and Middle Kingdoms* (Berkeley 1973).
- M. Lichtheim, *Ancient Egyptian Literature: Volume III. The Late Period* (Berkeley 1980).
- L. Llewellyn-Jones, 'Eunuchs and the harem in Achaemenid Persia', in S. Tougher (ed.), *Eunuchs in Antiquity and Beyond* (London and Swansea 2002), 19–49.
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Museion* 6 (2006), 1–25.
- G. Mobley, *Samson and the Liminal Hero in the Ancient Near East* (New York and London 2006).
- K.W. Perlo, *Kinship and Killing. The Animal World in Religions* (New York 2009).
- J. B. Pritchard (ed.), *Ancient Near Eastern Texts Related to the Old Testament* (Princeton 1969).
- R. Renehan, 'The Greek anthropocentric view of Man', *HSCP* 85 (1981), 239–59.
- R. Sallares, *The Ecology of the Ancient Greek World* (Ithaca, NY 1991).
- W. Scheidel, 'Demography', in W. Scheidel, I. Morris and R. Saller (eds), *The Cambridge Economic History of the Greco-Roman World* (Cambridge 2012), 38–86.
- R.A. Simkins, *Creator and Creation. Nature in the Worldview of Ancient Israel* (Peabody 1994).
- L. Thommen, *An Environmental History of Greece and Rome* (Cambridge 2012).
- S. Tougher, *The Eunuch in Byzantine History and Society* (London 2008).
- P. Watson, 'Erotion: puella delicata?', *CQ* 42 (1992), 253–68.
- C. Westermann, *Genesis* (London and New York 1987).
- H.N. Wolff, 'Gilgamesh, Enkidu, and the Heroic Life', *Journal of the American Oriental Society* 89.2 (1969), 392–8.
- W. Wright, *The Chronicle of Joshua the Stylite, Composed in Syriac AD 507* (Cambridge 1882).
- Z. Zevit, *What Really Happened in the Garden of Eden?* (New Haven 2013).

Birds

GOOSE

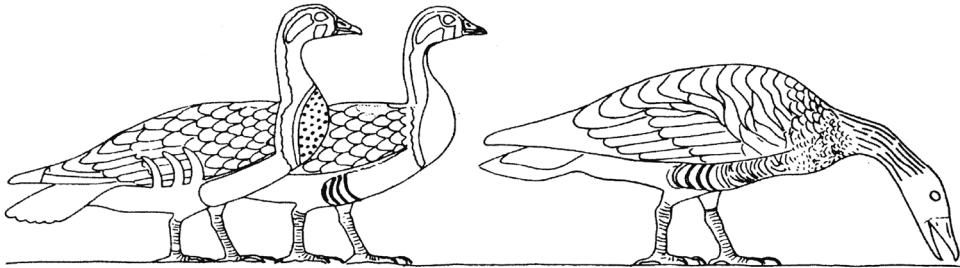
Evidence for the domestication of the goose stretches back to the Neolithic period; the bird was easily domesticated and, given its propensity to eat more than necessary, it was easy to fatten, rendering it too heavy to fly. In Mesopotamia geese appear on seals from Ur dating to the earliest periods, and although it is impossible to identify species, we know that geese were regularly herded and used as food and sacrificial offerings. The goose (Akkadian *kurku*) is a central figure in the poem *The Birds of Nanše*: ‘The goose cried out in the sky; [. . .] Its honking was sweet, its voice [was pleasing]. My lady [was attracted by] her goose.’ The goose was one of Egypt’s most important fowl, and Egyptian evidence allows for fuller species identification (below nos. 1 and 2): geese were bred for the table, the temples, and the tomb (Darby, Ghalioungui and Grivetti 1977: (I) 283–6; Vernus and Yoyotte 2005: 397–403). The cultural significance of the goose in Egypt is readily seen and cannot be overestimated.

The goose (Greek *chēn*, Latin *anser*) likewise appears as the earliest domesticated bird in Greece: it appears in the *Odyssey* as a barnyard animal before the introduction of the chicken (Albarella 2005: 252–3). All domestic geese were descended from the greylag goose (*Anser anser*), and white varieties were strongly preferred. In the Roman world they were to some extent supplanted by domestic fowl, but remained important not only for eggs and meat, but also for their feathers: Pliny (*NH* X.54) comments disapprovingly that in his time even men require the softness of goose-feather bedding. Geese also figure surprisingly often in classical sources as pets, and are credited with showing affection towards humans as well as acting as watchdogs to protect the household.

Wild geese were also common in the Mediterranean – Homer (*Il.* II.459–64) describes flocks of geese and other water birds – but species were not usually distinguished in antiquity: Aristotle simply divides them into large and small geese (*HA* 593b 22). Only the *chēnalopex*, the fox-geese, was seen as different, although this bird seems to have been a coalescence of two modern species, the Egyptian goose and the ruddy shelduck (Ael. *NAV*.30, XI.38; Arnott 2007: 31–2). Wild geese were hunted in winter, becoming a symbol of the season on Roman sarcophagi (Toynbee 2013: 263–4) and were noted for their distinctive flight pattern (Plin. *NH* X.63) and destructiveness to agricultural crops (Virg. *Georg.* I.118–21).

1. The Meidum Geese

*Detail of a line drawing, tomb of Nefermaat and Itet,
Meidum, Egypt, IV Dynasty c. 2575–51 BCE
(after Egyptian Museum, Cairo CG 1742)*



COMMENT: Regarded as a masterpiece of Egyptian art, the Meidum Geese were once part of a much larger scene found on the north wall in the tomb chapel of Itet, daughter-in-law of the pharaoh Snefru and wife of the vizier Nefermaat. The geese were depicted below a standard scene showing men trapping birds in a clap net, but this section of the painted scene is exceptional as the earliest example of an ornithological study and is notable for the extraordinary quality of the painting and the level of detail employed by the artist who clearly delighted in rendering the colours and textures of the birds' feathers. As Houlihan (1996: 141) states, 'these . . . portrayals are the results of careful observation of the living birds, and the level of accuracy achieved by the artisan or painter here is seldom encountered elsewhere.' The scene is set on the sparsely covered mud flats of the Nile's wetlands and three species of geese are shown: White-Fronted Geese, Bean Geese and Red-Breasted Geese.

The White-Fronted Goose (*Anser albifrons*) is regularly attested in Egyptian art and its image was used for a standard hieroglyphic sign. It flourishes well in captivity and is a social bird, easily domesticated. Moreover, its meat is very palatable and so the White-Fronted Goose was one of the most desirable table geese, so much so in fact that they have regularly been found in burial chambers from the XII to the XVIII Dynasties (Houlihan 1986: 57–9). By contrast, the Bean Goose is rarely seen in Egyptian art, although it too was much in demand for the food table and, in fact, two Bean Geese were discovered in the tomb of Tutankhamun. Finally, the representation of the Red-Breasted Geese in the Meidum frieze is the only known depiction of the species from Egypt. Without doubt the most striking of all geese, it is an ornamental species and fitting for royal interment: the remains of a Red-Breasted Goose were discovered in the funerary complex of King Aha at Abydos dating to I Dynasty (Houlihan 1996: 142). Not shown among the Meidum geese are the Egyptian goose or the Greylag Goose (*Anser anser*), though the latter was a sociable and easily domesticated bird.

Egyptian representations of geese are plentiful (Brewer, Redford and Redford 1994: 121–3) and they are commonly shown in depictions of aviaries and poultry yards where they are being fed by hand – the force-feeding of geese is frequently attested – or being moved along by goose-herds wielding long sticks, a skilled job, given the goose's notorious sense of independence: 'The goose returns from the pond, when one comes to shut it in the yard', notes one scribe (*Instruction of Any* 1.46). A fragmentary scene from the XVIII Dynasty tomb of Nebamun shows flocks of

geese being carefully brought into the farmyard for inspection (Houlihan 1986: fig. 75). A late New Kingdom text (c. 1000 BCE) describes the ideal Egyptian residence as a place packed with wildlife, and clearly teeming with happy geese:

A fowl yard and an aviary with geese; byres packed with oxen; a breeding bird pool with geese; horses in the stable. Your sustenance is established and a flood bearing fowl is for whomsoever has come to you. . . The west is a pond for snaring geese of all sorts, a resort of hunters from the very beginning. One of its ponds abounds in fish (more than a) lake. . . Many stalls are in its neighbourhood, a grazing field for the oxen, many goats, capering kids, and many lowing cattle . . . Fishes are more plentiful than the sand of the riverbanks; one cannot reach the end of them.

(after Caminos 1954: 412–13)

2. The Egyptian goose

Papyrus Lansing, Egyptian New Kingdom, XX Dynasty, c. 1189–1077 BCE (after Lichtheim 1976: 169)

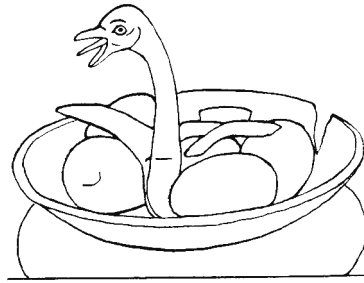
You are worse than the goose of the shore that is busy with mischief. It spends the summer destroying the dates, the winter destroying the seed-grain. It spends the balance of the year in pursuit of the cultivators. It does not let seed be cast to the ground without snatching it [in its fall (?)]. One cannot catch it by snaring. One does not offer it in the temple. The evil, sharp eyed bird that does no work!

COMMENT: Without doubt it is the Egyptian Goose (*Alopochen aegyptiaca*) which is at the centre of this critical didactic text. The most commonly represented goose in text and image, the Egyptian Goose was renowned for its vicious temperament and belligerent attitude, treating all other birds, animals and humans alike. It spent much of its day basking in the sun on mud flats or at the edge of the Nile, but joined other geese at dusk to flock together to invade grain and corn fields, sometimes to devastating effect. The Papyrus Lansing text may be amusing, but it contains valuable information about the difficulties that Egyptian farmers faced from this problematic bird.

The Egyptian goose was kept for poultry (although its flesh is coarse and not particularly tasty) and from the XVIII Dynasty the bird was depicted beneath the chairs of noble tomb owners. This does not necessarily mean that geese were kept as pets, although that possibility exists; more probably they were placed there to represent the presence of the god Amun, whose sacred bird they were. Despite the text's insistence that, 'One does not offer it in the temple', evidence does exist for the ritual slaughter of the goose: in the foundation deposits of the Theban mortuary temple of Thutmose III, for instance, the sacrificed remains of five Egyptian Geese were discovered (Houlihan 1986: 65).

3. The Great Cackler

Lid of an alabaster jar found in the tomb of Tutankhamun, Thebes, Egypt, XVIII Dynasty, c. 1323 BCE (after a photograph in Wilkinson 1992: 96)



COMMENT: This lid to an unguent jar is carved as a shallow bowl representing a nest in which are placed four goose eggs, besides the one that has split open to reveal a hatchling. The young gosling helplessly flaps its rudimentary wings and chirrups noisily for food (note how its tongue sticks out – an accurate representation of a hungry young bird).

Unsurprisingly, given its location in a royal tomb, this gosling surrounded by eggs had a deep symbolism and was meant to exert its magical influence within the tomb by reawakening the king in the underworld. The egg was the symbol of beginning, a representation of the primordial state of being itself. According to some accounts, the first god emerged from an egg and the creation of the universe was heralded by the cry of the gander known as *Negeg – Wer*, the ‘Great Cackler’, or *Gengen – Wer*, the ‘Great Honker’ (Wilkinson 2003: 213; in Mesopotamia the goose’s honk is also important and the god Adad is said to ‘thunder with the sound of a goose’).

The Heliopolitan myth claims that Atum, the great creator-god, emerged from a goose egg, but other myths claim the Great Cackler was a representative of Amun (‘The Hidden One’) or the earth-god Geb. The goose’s egg remained a symbol of Geb, and his powerful daughter, Isis, was sometimes called the ‘Egg of the Goose’. All Egyptians could claim descent from the first goose because the goose-hieroglyph was read as *sa* (‘son’) and *sat* (‘daughter’). The universe was also envisaged as a goose’s egg fashioned into being on a potter’s wheel by the god Ptah (as a parallel to the creation of mankind being brought into existence on the potter’s wheel of Khnum, the ram-headed deity). Not surprisingly, egg-shaped amulets were placed in tombs as guarantors of rebirth.

4. Goose and prince

Line drawing of a wall painting from the tomb of Kenamun at Thebes (TT 93), Egypt, XVIII Dynasty, reign of Amenhotep II, c. 1400 BCE (line drawing after Desroches Noblecourt 2007: 76)



COMMENT: On a wall of his tomb Kenamun, the Royal Steward of Amenhotep II, proudly depicted his mother; the hieroglyphs name her as ‘Amenenopet, the great nurse who brought up the god’. She sits with a young prince – the future pharaoh Amenhotep II – seated on her knee and they embrace fondly. Flying above the royal youth is a well-observed goose. It is a noble image, recalling a line from Papyrus Harris: ‘The goose soars and alights while the ordinary birds circle.’

Nonetheless, this is an unusual depiction, not so much the fact that the image shows the goose in flight, since geese on the wing are often represented in Egyptian art, but because the vulture usually takes precedence in being the bird most intimately connected to the safety and well-being of the pharaoh (see *VULTURE* no. 1). So why is there a goose hovering over Amenhotep? This is no doubt an image of *Negeg – Wer*, the Great Cackler (note that the bird’s beak is open suggesting that it is indeed vocalising a call). It is possible that the goose was a symbol of Egyptian princes and that here the goose flies above the prince’s head whereas the adult pharaoh would be protected by the vulture. Tutankhamun’s tomb contained an alabaster image of a gosling (above no. 3) as well as earrings bearing goose-heads (Andrews 1990: fig. 92), while a signet ring belonging to Ramses IV during the period when he was still a prince bears the image of a goose (Wilkinson 1992: 97).

Beyond the goose–prince connection, however, bird similes were regularly employed to refer to the king at various times of his life. He was said to be ‘king [while yet in] the egg’ (Caminos 1954: 40) and to have emerged from an egg in a manner associated with the Hermopolitan idea of the Great Cackler. The young king was also called a ‘fledgling’ (Kozloff 2012). From as early as the Old Kingdom, the Pyramid Texts were describing the royal aspiration to fly to heaven as a goose, and something of that desire is captured too in Kenamun’s tomb painting.

5. Penelope's geese

Homer, Odyssey XIX.535–53

'But come, hear my dream and interpret it for me.
I have twenty geese in the yard, eating grain
At the pond's edge, and I delight in watching them;
But a great eagle with curved beak swept down from the mountain,
Seized them by the neck, and killed them all, leaving the geese
Heaped up together in the yard, and the eagle swooped back into the heavens.
And in the dream I wept and lamented, and around me
The fair-tressed Achaean women gathered
In pity at my mourning because the eagle had killed my geese.
But then the eagle flew back and settled on the projecting roof-beam,
And spoke to me in a human voice, to stay my grief:
"Be cheerful, daughter of renowned Ikarios,
This is no dream, but a true vision of what will be accomplished for you.
The geese were the suitors, and I the eagle,
Your own husband who has now returned
To wreak a shameful fate upon all the suitors."
So the eagle spoke, and immediately sweet sleep left me,
And I looked and saw my geese still in the yard,
Pecking grain from the trough as before.'

COMMENT: Penelope's geese in the *Odyssey* occupy an interesting middle ground between farmed animals and pets: she takes pleasure in watching them feed and swim, and mourns their sudden death in the dream, yet they were plainly kept as productive creatures for eggs and meat, not solely for entertainment. Many later Greek sources refer to affectionate relationships between geese and women (and children: see below), presumably because as creatures of the courtyard it was primarily women who cared for them: a fifth-century cup in Berlin by Douris (F2306: Lewis 2002: fig. 2.27) depicts a woman sitting and feeding two geese with sprigs of greenery from a pot, and others depict geese at the feet of women in the household, though this may be more symbolic than realistic. Geese were the sacred creatures of Aphrodite, who is sometimes depicted in Greek art riding a goose, and were a symbol of marital harmony (Lewis 2002: 161–6).

In the context of the *Odyssey* the interpretation of Penelope's dream has generated much debate, since some find the metaphorical link between the geese and the suitors inappropriate, given the affection which she feels towards them. Instead it has been suggested that the twenty geese represent the twenty years of Odysseus' absence which are now being brought to an end (see Rozokoki 2001 for a summary of the debate).

6. Sacred geese

Plutarch On the Fortune of Rome (Mor. 325b–c)

... and waiting for the dead of night, [the Gauls] climbed up [to the Capitol] unnoted not only by the guards, but even by their fellow watchers and companions, the watchdogs, which were asleep.

And yet the Fortune of Rome did not lack a voice to warn of so great a disaster and a means to raise the alarm: for the sacred geese lived around the temple of Juno,

in the service of the god. These creatures are by nature easily startled and alarmed, and on this occasion, because they had been neglected because of the severe famine among the defenders, their sleep was light and disturbed by hunger, so that they immediately noticed the enemy as their heads appeared above the cliff, and rushed towards them, cackling; and being even more disturbed by the sight of their weapons, they filled the Capitol with a loud and piercing clamour. Alerted, the Romans realised what was happening and repelled the enemy, casting them back down the cliff. Ever since this incident, in commemoration of the events, the Romans hold an annual procession in which a dog is paraded on a cross, while a goose is carried solemnly in a litter on sumptuous bedding.

COMMENT: The tale of the geese which defended the Capitol is very well-known (Livy V.47.1–7; Plut. *Cam.* 27; Diod. XIV.116.5–7; Dion. Hal. XIII.7.3), but modern scholarship agrees that it is an invention, created to perpetuate the tradition that the Gauls did not in fact capture Rome (Horsfall 1981; Ziolkowski 1993). The invention of the story is hard to trace, since both Plutarch and Pliny (*NH* XXIX.57) were familiar with a religious ritual which commemorated the action of the geese, yet evidence for sacred geese on the Capitol before 345 BCE, or for the temple of Juno Moneta where they are supposed to have lived, is entirely absent. Geese were certainly known for their usefulness as guards, readily alerting a household to the presence of strangers (*Greek Anthology* VII.425; Ov. *Met.* VIII.687), and this may have combined with the Eastern phenomenon of keeping sacred birds in temples (Athen. 655a–c; see PEACOCK no. 5) to form the seed of the story. It is interesting that Plutarch says that the geese had gone unfed because of the famine, while Livy states specifically that they had not been killed despite the famine: there was clearly some unease over the verisimilitude of events.

The tale nevertheless had great power in Roman history, and there certainly were sacred geese of Juno in later times, maintained at public expense – Plutarch (*Mor.* 287b–d) says that one of the first acts of the censors on taking office was to see to the contract for grain for the geese. The ritual, with its punishment of dogs and praise of geese may (according to Horsfall 1981: 310–11) have developed from separate and forgotten roots into an event which supported the positive historical story.

7. Fattening geese

Geoponica XIV.22

One should choose the largest and whitest geese. Make the enclosure for geese in a place which has good pasture and is well-watered. Feed them a diet of pulses of all kinds except vetch, and give them lettuce leaves too. They should not eat mule-grass, as it causes them indigestion. Geese lay eggs three times a year, up to twelve in a clutch, or sometimes more; some of the eggs should be brooded under hens. The goslings should stay indoors for their first few days, but when the weather is good one should lead them out to pasture, and to water when they have eaten their fill. One should take care that they are not stung by nettles or thistles, and also that they do not swallow the bristle of a goat or a pig, for this is fatal to them. As soon as the goslings hatch out they should have pearl barley and soaked wheat to eat, and green cress.

Geese are fattened in warm pens, with a mixture of two parts wheat and four parts bran with warm water scattered for them to eat as much as they desire. They eat three times a day, and around midnight, and they drink liberally. When they are grown to a

good size, mix finely-chopped dried figs with water and give it to them to drink for twenty days.

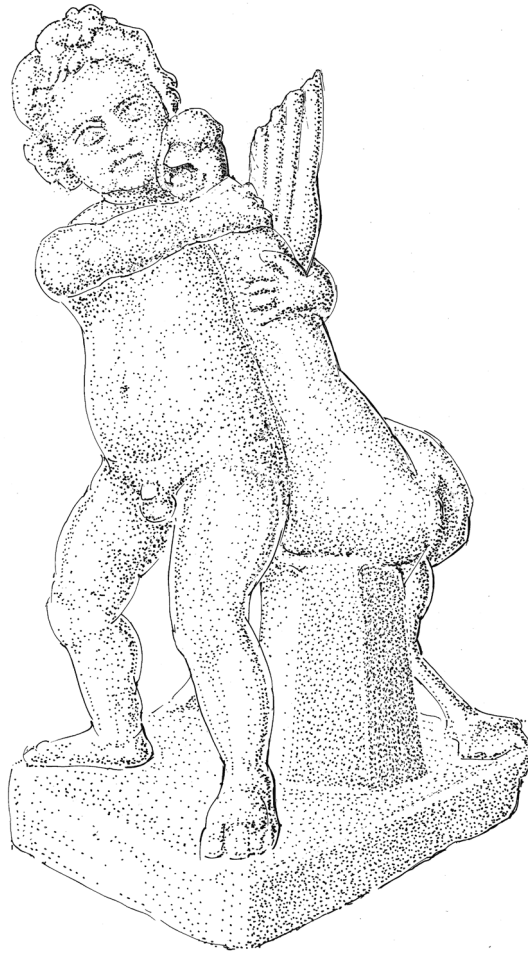
You should mark the eggs belonging to each goose with a particular sign, so that you can set them under their mother; for geese will not brood the eggs of others. You should set nine eggs, or at most eleven, but not fewer than seven. Generally geese brood for twenty-nine days, but for thirty when the weather is cold. While the bird is sitting you should set before it barley soaked in water.

After thirty days if one wishes to make their livers large, chop dried figs finely and mix them with water, and feed the geese by hand for twenty days, or for seventeen days at least. But some people raise geese in the following way to make their livers large and the geese fat: they shut the geese up and scatter for them soaked wheat or barley; for wheat fattens them quickly and barley makes their flesh white. Let the geese eat these two foods for twenty-five days, and then bring them nine pellets of food twice a day for five days; then gradually increase it to fifteen pellets until thirty days have passed. After fifty days boil some mallows and sprinkle some leaven with the liquid while it is hot, and give it to the geese for four days. At the same time give the geese honey and milk to drink, changing it three times a day, and on the following seven days give them finely-chopped dried figs along with the leaven. In this way after sixty days the geese's flesh and livers will be tender and white; when you remove the liver you should put it into a broad dish of tepid water, changing the water several times. The flesh and livers of female birds are the best. The geese should not be a year old, but between two and four years in age.

COMMENT: Varro (*De Re Rustica* III.10), Columella (*De Agricultura* VIII.13–14) and the Byzantine farming handbook *Geoponica* all offer the same advice on rearing geese – selection of the flock, breeding, laying and care of goslings – but although the version above is the least polished in literary terms, it is the only one to discuss the production of goose liver as a speciality. The process of fattening geese was previously known from Egypt, but according to Athenaeus (384c) the Romans developed a taste for *foie gras*, and the use of dried figs, as recommended here, gave it the name *iecur ficatum* from which the modern Italian *fegato* derives (Hor. *Sat.* II.8.88). The discussion among agricultural writers relates to small-scale farming, but Pliny also refers to geese brought from further afield, small white geese from Germany which were esteemed for their down, and geese driven to market in Rome from the territory of the Morini in Gaul (*NH* X.53). He notes that this last feat, bringing geese on foot for a journey of a hundred days, is remarkable, and while goose-droving over long distances was common in the eighteenth and nineteenth centuries, modern investigations have tested the feasibility of such a long journey in antiquity: one can be seen on a 1966 BBC Chronicle programme at www.bbc.co.uk/archive/chronicle/8619.shtml.

8. Boy and goose

**Roman marble statue group, Munich Glyptothek 268
(drawing by Tessa Rickards)**



COMMENT: The image of the young child playing with a goose is common in many forms of classical art: as a household bird the goose was a ready playmate and companion for a child, and is shown on the Attic *choes*, miniature jugs given to children at the festival of the Anthesteria (Hamilton 1992) and on Attic tombstones as a companion to children and young women (Clairmont 1993: vol.VI), while a series of Hellenistic terracottas and Roman statues depicts boys from babies to middle childhood petting or struggling to hold a goose (Gardner 1885). The statue in Figure 2.58 is one particular type of this group, the ‘Boy Strangling a Goose’, depicting an older child wrestling with an agitated goose: several Roman marble copies exist in Munich, Rome (Altemps 8565) and Paris (Louvre 40) of what was originally a Hellenistic bronze statue. The type is also referred to in literature: Pliny (*NH* 34.84) says that it was the work of Boethus of Chalkedon, and Herodas 4.31 refers to a copy in Alexandria. Ridgway (2006) has suggested

that it had a religious meaning derived from Egyptian models, but as Gardner's more extensive catalogue demonstrates, the theme was far too broad to be susceptible to a single interpretation.

Literary sources also refer to geese as playthings and pets – Plato relates that Archelaus, king of Macedon, killed his seven-year-old brother by throwing him into a well and claiming that he had fallen in while chasing a goose (*Gorg.* 471C) – and ancient writers credit geese with showing affection to their owners. Both Aelian and Pliny recount tales of geese which were devoted to humans, including that of the Peripatetic philosopher Lacydes, whose goose followed him everywhere he went, even to the baths, and to which he gave an expensive funeral when it died (*On Animals* 7.41, *NH* 10.51).

Bibliography

- U. Albarella, 'Alternate fortunes? The role of domestic ducks and geese from Roman to Medieval times in Britain', in G. Grupe and J. Peters (eds), *Feathers, Grit and Symbolism: birds and humans in the ancient old and new worlds* (Rahden 2005), 249–58.
- C. Andrews, *Ancient Egyptian Jewellery* (London 1990).
- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
- D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals. The Egyptian Origins* (Warminster 1994).
- R.A. Caminos, *Late Egyptian Miscellanies* (London 1954).
- C. Clairmont, *Classical Attic Tombstones* (Kilchberg 1993).
- W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London and New York 1977).
- C. Desroches Noblecourt, *Gifts from the Pharaohs: how Ancient Egyptian civilization shaped the modern world* (London 2007).
- E.A. Gardner, 'A statuette representing a boy and a goose', *JHS* 6 (1885), 1–15.
- R. Hamilton, *Choes and Anthesteria: Athenian iconography and ritual* (Ann Arbor 1992).
- N. Horsfall, 'From history to legend: M. Manlius and the geese', *CJ* 76 (1981), 298–311.
- P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- A.P. Kozloff, 'Pharaoh was a good egg, but whose egg was he?' in R. Bailleul-LeSuer (ed.), *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012), 59–64.
- S. Lewis, *The Athenian Woman: an iconographic handbook* (London 2002).
- M. Lichtheim, *Ancient Egyptian Literature. Volume II: The New Kingdom* (Berkeley 1976).
- J. Pollard, *Birds in Greek Life and Myth* (London 1977).
- B.S. Ridgway, 'The boy strangling the goose: genre figure or mythological symbol?' *AJA* 110 (2006), 643–8.
- A. Rozokoki, 'Penelope's dream in Book 19 of the Odyssey', *CQ* 51 (2001), 1–6.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
- R.H. Wilkinson, *Reading Egyptian Art* (London 1992).
- R.H. Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003).
- A. Ziolkowski, 'Between the geese and the Auguraculum: the origins of the cult of Juno on the arx', *CP* 88 (1993), 206–19.

DUCK

With their elongated and broad bodies, short necks and strong scaled legs set far back on the body, ducks are a highly aquatic species. Many are temporarily flightless during their moulting season – some drakes have an elaborately colourful plumage – but on the whole they are able to fly considerable distances. Ducks, as typical of the *Anatidae* family (which includes swans, geese and waders), live on a diet consisting of vegetation, insects and larvae, worms, molluscs, crustaceans and fish. Occasionally they eat small frogs and other amphibians (De Rijke 2008).

Ducks were well known in ancient Egyptian society, both as hunting trophies and domestic necessities (Darby, Ghalioungui and Grivetti 1977 (I): 282–3; Bailleul-LeSuer 2012). A wide variety of species were found: the Egyptian goose (*Alopochen aegyptiacus*, a duck and not a goose at all), the ruddy shelduck (*Tadorna ferruginea*), the mallard (*Anas platyrhynchos*), the gadwall (*Anas strepera*), the widgeon (*Anas penelope*), the teal (*Anas crecca*), the tufted duck (*Aythya fuligula*), the pochard (*Aythya ferina*), the ferruginous duck (*Aythya nyroca*) and the pintail (*Anas acuta*) – the most common of all species (Houlihan 1986: 62–74). In fact,

the Egyptian Nile offered an excellent haven for migrating birds; thousands of ducks, waders and many other groups could be found wintering in Egypt. Approximately seventy-five avian taxa have been identified in Egyptian art, and more than 450 taxa have been identified as living in Egypt.

(Brewer 2002: 453)

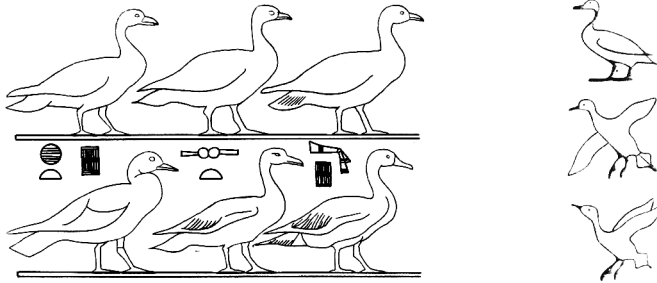
Ducks are frequently encountered in Mesopotamian offering texts and sacrifice lists, as well as in fine works of art such as cosmetic containers carved in ivory or wood (the bird is usually represented with its head turned upon its back as if asleep) or moulded in metals as weights or axe-heads. Ducks were a common ingredient in Mesopotamian cooking, although they were possibly considered unclean by the Israelites. Certainly ducks are never mentioned directly in the Hebrew bible.

Both wild and domesticated ducks were known in the Mediterranean from the earliest times: as wild birds they are winter visitors only, apart from the mallard and teal to which there are references year-round (Arnott 2007: 146). The Greek term for duck, *netta*, means ‘swimming bird’, and the term was used very broadly to designate several kinds of water-bird: in a fragment from his *On Birds* (Athen. 395c–e), Alexander of Myndos describes seven kinds of duck, but one is clearly a grebe and another a coot, suggesting that little attention was paid to individual species. Wild ducks were hunted for their meat (Longus *D&C* II.12.4; *Geoponica* XIV.23.4), and are also noted as indicators of bad weather (Theophrastus *Weather Signs* 18, 28; Aratus *Phaenom.* 917–18).

Domestic ducks were familiar barnyard animals for the Greeks and Romans (Ael. *NA* 5.33), although not as common as either chickens or geese, and they lacked the strong religious associations of the latter birds. In art, however, the duck offered a very popular motif, and duck-shaped flasks (*askoi*) are found across many Mediterranean cultures: in Minoan Crete (Boardman 1998: 16 and fig. 25), in Etruria (Brendel 1995: 350–1 and fig. 273), and in East Greece (Ducat 1996: 91–4 and pl. 12). Repeating motifs of ducks are common in Greek Geometric art, and duck-head handles are found on Greek and Roman vessels and utensils. In Roman art ducks are represented in many ‘still life’ scenes, but most frequently appear in Nilotic scenes, representing typical Egyptian fauna (see HIPPOPOTAMUS no. 9): despite their familiarity as Italian birds they became a canonical part of the Egyptian landscape for Romans (Tammisto 1997: 62–5).

1. Domesticated ducks and duck hieroglyphs

a) Line drawing of a wall painting from the tomb of the scribe Horemheb at Thebes, XVIII Dynasty; b) Line drawings of hieroglyphs incorporating duck images (after Wilkinson 1992: 94–5)



COMMENT: The pintail duck was the most common waterfowl of ancient Egypt, having been domesticated at a very early period, and it was often represented in art either in household scenes (as here) or, more abstractly, as part of the hieroglyphic writing system: all three signs shown here were used as indefinite determinatives for waterfowl or birds in general (of course, there is a possibility that the signs are schematic representations of a goose; see GOOSE).

Beyond the merely representational, the image of the duck had a deep-rooted symbolic importance for the Egyptians, who saw the bird as both a suppressor of evil and an evocation of rebirth. The wild marshes where ducks flourished were thought to be the locales of evil spirits, and to some extent ducks were associated with these malignant forces; in fowling scenes depicted in New Kingdom elite tombs, noblemen hunt ducks as a symbol of controlling the chaos of evil (and perhaps the images of ducks found on chair-legs and footstools were there to be ‘crushed’ beneath human weight). Alternatively, ducks were potent fertility symbols and had rich erotic connotations: ivory and wooden images of young girls swimming with ducks were often used as cosmetic containers, while New Kingdom hunting scenes often depict the Lady of the House delicately holding a duckling between her breasts. The sheer number of ducks to be found in the marshes of Egypt added to the belief in their fecundity and the link between the bird and rebirth is clearly expressed in the Pyramid Texts (Spell 461) where the soul of the king takes the form of a duck as it flies to heaven (Wilson 2014).

2. Ducks absorb evil

Akkadian magic spell (Maul 1994: §VIII.1.2: 63–6)

You capture a male and female shelduck. You pour flour into well water. You rub off the body of the person (with it). You f[feed it] to those birds. The person carries those birds in his hands, the male in his right hand, the female in his left. . .

COMMENT: In ancient Mesopotamian religious practice animals and birds played a very important function as ‘absorbing pads for evil’ (Scurlock 2002: 371). In other words, the evil which was thought to reside within a human being was transferred into an animal or bird or even a fish via

magical incantations and prescribed rituals. This could be done by getting the animal to ingest food (often bread) which had been magically imbued with the evil or by covering the animal in a substance which was thought to contain the evil. In this particular case, two wild shelducks are fed with a flour-based paste which, having been smeared over the suppliant, 'carries' the man's evil; at a set moment within a ritual of purification, and with a recitation having been made, the male bird is released to the east and the female to the west. With their flight the human is released from his demons. A similar practice was found at the Neo-Assyrian court as part of the *bit riniki* ritual, wherein the king, confirming the order of the universe, captured two ducks, sprinkled them with oil and fed them, before releasing them to the east and west (Scurlock 2002: 371, n. 26).

3. On duck-rearing

Columella De Agricultura VIII.15

An enclosure for ducks requires the same care [as a place for geese], but is more expensive, if birds such as mallards, teal, shelduck and coot which dabble for food in ponds and marshes are to be raised in captivity. A flat site is chosen and surrounded with a high wall of fifteen feet, and the wall covered over with a lattice supporting wide-meshed nets, to prevent the domestic birds from flying away and eagles and hawks from flying in. The whole of the wall should be smoothed with plaster both inside and out, to prevent cats or weasels creeping in. In the middle of the enclosure a pond two feet deep should be dug out, as long and as wide as the space itself permits. The border of the pond should be lined with waterproof cement so that it is not damaged by the force of the water overflowing, since it should always be running in, and should not be built with a step, but gradually sloping downwards, so it descends like a shore into the water. The base of the pond around its circumference should be paved with stones rammed in and plastered, covering two thirds of the whole area, to prevent plants growing through which would make the ducks unable to swim on the surface. But the centre of the pond should be made of earth, so that it can be sown with Egyptian bean and other such green plants which provide shady hiding-places for the birds. Some ducks prefer to hide away in little clumps of tamarisk or stands of rushes, but the whole of the pond should not be covered with clumps of vegetation; as I have said, the shore should be left clear so that on warm days when they are lively the birds can race against each other. For just as ducks like to have hiding-places and spots in which they can lie in wait for elusive river-creatures, so they are dissatisfied if they lack open space in which they can swim about.

Banks of grass should surround the pond for twenty feet in each direction, and beyond this, around the wall there should be nesting-boxes for the ducks, one foot square and made of stone lined with smooth plaster, sheltered by bushes of box or myrtle no higher than the wall. Next a little channel should be constructed set into the ground, running uninterrupted, along which the ducks' food, mixed with the water, may run each day: for this is how ducks are fed. Their favourite food among land plants are panic-grass and millet, and also barley, though where a good supply is available they can also be given acorns and grape-skins. If there is a supply of aquatic food, they are given crayfish and pickled river fish, and other small river-animals.

Their mating season is March and April, just as with wild ducks, at which time straws and twigs should be scattered through the enclosure for the birds to collect and build their nests. But it is most important, if one wants to establish a duck enclosure, to collect

the eggs of these birds from around the marshes where they lay, and brood them under barnyard hens. Ducks which are hatched and reared in this way forget their wild habits and will readily breed in captivity. But if you try to accustom wild birds which have been caught to live in captivity, when they have been used to freedom, they are slow to breed. But I have said enough about the management of swimming birds.

COMMENT: Columella's discussion of the *nessitrophium* represents a particular type of farming which became more prevalent in first-century BCE Italy: the intensive raising of animals or birds for the specialist market. He admits that the enclosure described here is expensive with its purpose-built pond and stream, and such an investment would be viable only if the ducks could be sold at a considerable profit. The duck was a regular barnyard animal – Theophrastus refers to domestic ducks seeking shelter under the eaves of the house (*Weather Signs* 18) – though not as commonly kept as geese since they could be easily hunted from the wild, as this extract suggests. Duck meat was seen as valuable in health-giving regimes because of its lightness (Plut. *Cato Ma.* 23.4), although duck eggs do not appear to have been popular at Rome (Smith 1994). It is possible that feathers and down were also gathered for household use. At VI.7 Columella mentions a further unusual benefit of keeping ducks; an ox, horse or mule which is suffering from colic can be cured by the sight of a swimming bird, especially a duck.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 R. Bailleul-LeSuer, *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
 J. Boardman, *Early Greek Vase Painting, 11th–6th Centuries BC: a handbook* (London 1998).
 O.J. Brendel, *Etruscan Art* (New Haven 1995).
 D. Brewer, 'Hunting, animal husbandry and diet in ancient Egypt', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 427–56.
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London and New York 1977).
 V. De Rijke, *Duck* (London 2008).
 J. Ducat, *Les vases plastiques rhodiens archaïques en terre cuite* (Paris 1966).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 S.M. Maul, *Zukunftsbewältigung: Eine Untersuchung altorientalischen Denkens anhand der babylonisch-assyrischen Löserituale* (Mainz 1994).
 J. Scurlock, 'Animals in Ancient Mesopotamian Religion', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 361–403.
 M.F. Smith, 'Ducks' eggs in Statius, *Silvae* 4.9.30?' *CQ* 44 (1994), 551–4.
 A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
 G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.
 K. White, *Roman Farming* (Ithaca 1970).
 R.H. Wilkinson, *Reading Egyptian Art* (London 1992).
 H. Wilson, 'If it looks like a duck. . .', *Ancient Egypt* 14.6 (2014), 52–6.

CHICKEN

Chickens (*Gallus gallus*) in the form of red junglefowl and grey junglefowl – the ordinary chicken by any other name – were first domesticated in Southeast Asia some 10,000 years ago; the regular egg-laying capabilities of hens no doubt made the birds desirable for controlled breeding.

As Cocker has shown, 'the bird's domesticated form, familiar all over the world . . . has helped shape human civilization' (Cocker 2013: 63) and so by the sixth millennium BCE chickens were already being reared in the Indus Valley (Chaline 2011: 90–1; Potts 2012: 12). From here they spread into Mesopotamia. Etymological studies of Sumerian vocabulary have suggested that by 2500 BCE chickens were well known in the Third Dynasty at Ur, although they only enter into the artistic repertoire some time later in the fourteenth century BCE when four hens and four crested roosters are depicted on an ivory cup from Ashur (Houlihan 1986: 80). Assyrian potters were also responsible for creating a rooster rhyton discovered in Anatolia (Kozloff, Mitten and Sguaitamatti 1986: 9–10). A few glyptic seal-images of chickens were found at Nimrud dating to c. 730 BCE while an Assyrian stone relief shows two men in the act of prayer raising a cockerel towards an altar, suggesting some kind of religious rite involving a chicken (Zeuner 1963: 446; Cocker 2013: 65; see below nos 2 and 3). There is no overt mention of chickens or cockerels in the Hebrew bible (Parmelee 1960), although a reference to a strutting *zarzir motnayim* in the book of Proverbs (30.31) might be to that of a rooster (Forti 2008: 121; Peters 1914 argues that a reference to a cockerel can also be found in Isaiah 22.17). Cockerels were already symbols of royalty in Israel in the late seventh century BCE, as demonstrated by an image engraved into seal-stones belonging to King Jehoahaz and a number of princes of the royal house (Keel and Staubli 2003: 56–7). As has been noted, 'when (the) chicken arrives in a Levantine animal economy, it tends to be a rather dramatic event, one recorded by dozens or even hundreds of bone finds' (Hesse and Wapnish 2002: 462).

Through trade and tribute, the chicken entered into Egypt during the New Kingdom, although it did not become a regular feature of the Egyptian farmyard until the Late Period, following on from its full-scale introduction into the country by the Persians. In the Ptolemaic era the chicken was commonplace and Egyptian aviculturists exploited the birds' ability to lay eggs by establishing incubating farms on a large scale (Houlihan 1986: 81). There is little evidence to suggest the chicken formed a staple of the Mesopotamian and Egyptian diet before the Greek period, nor do chickens appear in any cultural context; there is, for instance, no evidence of the organised sport of cock-fighting in Egypt or Mesopotamia (Potts 2012: 13), nor do they take on any symbolic significance.

Unlike Penelope's geese, chickens are absent from the Homeric poems, and from the contemporary Hesiod: while a few isolated bones have been identified at Dark Age sites (Sallares 1991: 230), the chicken was not introduced into Greece until the sixth century BCE. It appears a century earlier in art (see below), but Theognis is the earliest writer to show familiarity with its habits, describing its crowing at daybreak (864). The morning cockcrow became one of the most significant indicators of time in the ancient world: an epitaph for a cock in the *Greek Anthology* (VII.202) describes how it roused the writer from sleep every day, flapping its wings, and of course in the New Testament the disciple Peter is told, 'before the cock crows you will betray me' (Matthew 26.34; see also Plat. *Symp.* 223c; Ael. *NA* IV.29; for the cock's crow see Cocker 2013: 67–9). The cock even appeared on the coinage of the Sicilian polis of Himera as a pun on *hemera*, 'day' (Kraay 1976: 208 and figs 760–3).

The chicken was initially valued more as a fighting bird than as a source of food, and the specialised farming of chickens does not seem to have appeared until the later classical period on Delos (Pliny *NH* X.139). It had already spread to Italy via the Greek colonies there (Sallares 1991: 230); there is a persistent belief that the Romans then introduced domestic fowl across their empire, but this is anachronistic: chickens had already spread across Iron Age Europe (Parker 1988: 202), and were present in Britain at the time of the Roman conquest (Caes. *BGV*.12.6), although the Romans did bring more intensive farming techniques and a greater demand for meat and eggs. Columella indicates that many different breeds were known, some specifically for fighting and some for farming,

although he dismisses bantams (*pumiles*) as good only for their entertaining appearance (*De Agri.* VIII.2.14). Both chicken and eggs became staples of the Roman diet, the latter becoming proverbial as the beginning of a meal in the phrase *ab ovo usque ad mala* – from eggs to apples (*Hor. Sat.* I.3).

1. Pharaoh's rooster

***Black ink drawing on a limestone ostrakon, Egyptian XIX Dynasty,
c. 1292–1189 BCE, from the Valley of the Kings, Thebes
(after Zeuner 1963: 445)***



COMMENT: This sketch of a red junglefowl, probably made from life, depicts the bird's characteristics with real accuracy: its upright posture, its strutting gait, high comb and cheek lappets, and its long tail feathers are perfectly represented. Such an illustration is exceptionally rare in Egyptian art, suggesting that the chicken was not a common sight in the pharaonic period. In fact chickens were probably hailed as a marvellous rarity and were encountered in Egypt first as diplomatic gifts and later as spoils of war and trade. A short fragmentary passage in the annals of the XVIII Dynasty pharaoh Thutmose III from Karnak suggests that in his regnal year 38, chickens were sent to the royal palace as part of a large tribute from Syria: 'four wild fowl of the country that [lay eggs (?)] every day.' The reading is uncertain, since the keyword *ms* ('lay eggs') is missing, but it is convincingly argued that this is the earliest reference to chickens in Egypt (Houlihan 1986: 80; Brewer, Redford and Redford 1994: 124). The chicken's ability to lay numerous eggs each day must have been a source of wonder for the Egyptians who were more familiar with the more limited egg-laying capabilities of water fowl, and their access to eggs as a source of food was strictly limited to the spring mating season of geese, ducks and related species.

In the succeeding centuries chickens make very few appearances in Egyptian art. Examples are known on pottery from Bubastis in the Delta from the XX Dynasty and from the XXX Dynasty tomb of Hapu the harpist who is depicted with a rooster sitting at his feet (Houlihan 1986: 80, fig. 113). Here the unusual bird still enjoys the lifestyle of an honoured pet. Following the Persian invasion of Egypt, however, chickens become a regular feature of Egyptian life. The splendid tomb of Petosiris at Tuna el-Gebel, dating to the reign of Philip Arrhidaeus (232–16 BCE), contains a traditional procession scene of funerary gifts (including livestock) being brought to the deceased, including two red junglefowl (Houlihan 1996: 80, fig. 114). From this point onward the chicken becomes part of the Egyptian diet and osteological evidence attests to its widespread

domestication throughout the Nile Valley, so much so indeed that by the Roman period Egypt was benefitting from a thriving chicken-based industry.

2. Chicken blood and exorcisms

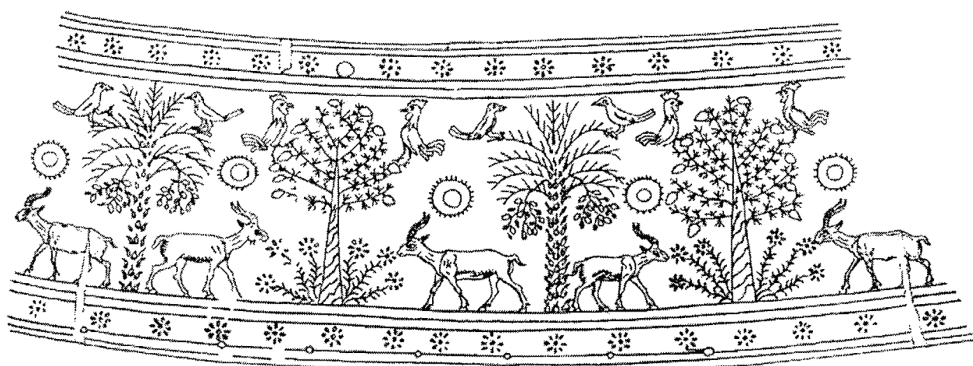
Neo-Assyrian Akkadian ritual text (LKA 85:1, 5–18; after Scurlock 2002: 376)

If a man is continually dizzy (and) says: ‘Oh, my heart!’ . . . You slaughter a caged chicken over his heart. While tearing out the heart of the chicken and putting it over his heart, the *dsipu* [priest] lays his hands on him (the patient) and says as follows: ‘Remove the evil ghost; remove the evil ghost so that it does not approach the man’s body. May it (the heart) chase away whatever is evil for him (the patient).’ He says (this) seven times and when he removes the bird’s heart and lays it on the ground, a woman who is past childbearing age picks (it) up and (does so) without looking behind her. . . . When he places the heart in a hole facing east, she closes (the hole’s) opening with dough made from *sigusu*-flour and (does so) without looking behind her.

COMMENT: Birds are frequently used in Assyrian and Babylonian scapegoat rituals (see DUCK no. 2). In this particular text the reading ‘chicken’ is not certain and it has been suggested that ‘goose’ could be an alternative version. If the reading is ‘chicken’, however, this is useful evidence for the integration of the bird into Assyrian daily life. The ritual described here is a familiar one: the caged chicken is (presumably) killed in the presence of an individual suffering from evil spirit possession. The blood of the bird is dripped on to the patient’s heart as the heart of the bird is removed from its body. A ritual incantation then invites the bad spirit to reside in the chicken’s heart and when it is perceived to have made the transition, the ghost finally finds itself trapped within the heart which is placed inside a hole; thus the spirit is unable to harm the patient any further. A variation on the ritual has the hole blocked up and smeared with the chicken’s blood which is mixed with mud taken from the temple of Ishtar (Scurlock 2002: 376).

3. Roosters in the treetops

Line-drawing taken from an ivory pyxis, Middle Assyrian period (late fourteenth century BCE) from Diam (New York, Metropolitan Museum of Art VA Ass 1099)



COMMENT: Incised onto an ivory *pyxis* is a continuous pattern (reminiscent of a cylinder seal impression) depicting pairs of gazelle eating shrubs which spring from a stylised tree, beneath a rayed sun-disk. In the canopies of the trees sit, variously, song birds and cockerels. The floral and faunal images together conjure the idea of an exotic paradise, and the presence of the rare jungle fowl gives an added dimension to that notion. Indeed, the cockerels may have a magico-religious significance connected to rejuvenation, fertility or immortality (Porada 1986). Whatever the purpose of their appearance on the *pyxis*, the dating of the object helps secure the history of the chicken in the Near East (see further discussions by Serjeantson 2009: 270–3). It is important to recall that in the wild cockerels are known to run with speed, fly comparatively high and roost in treetops and that increased domestication resulted in their inability (or reluctance) to fly, largely due to the human desire to breed larger males for food, display purposes or for sport (Serjeantson 2009: 273).

4. The Great King's hen house?

Elamite cuneiform texts from Persepolis, Iran, c. 509–457 BCE (after Hallock 1969)

PF 280

22 male adults, 30 male chicks, 22 female adults, 3 female yearlings, 10 female chicks: total 87 *basbas* [chickens?] alive, were entrusted to Marryadadda. . .

PF 697

124 fowls, (included) in them (being): 2 *ippur*, 12 *basbas*, 25 *šudaba*, 95 *kuktukka* fowls, supplied by Iršena, were dispensed in behalf of the king.

PF 1722

150 (BAR of) grain, supplied by Parru, Nabbadudu received, and gave (it) to the *basbas* of the district. 10 *basbas* for a period of 1 month received 5 BAR of grain. 30 *basbas* for a period of 6 months received 15 BAR of grain. 22 *basbas* for a period of 5 months monthly (are) receiving 11 (BAR) of grain. For a period of 12 months.

COMMENT: The word *basbas* used in the Persepolis Fortification Tablets some forty times is open to interpretation. It clearly refers to a bird and Hallock, the texts' original editor, thought that the fowl referred to was 'presumably a duck' (1969: 675; however it is more likely that the *šudaba* of PF 697 is a duck). Tuplin has demonstrated (1996: 108, n. 93) that the *basbas*-birds receive the finest grain, and in plentiful measure; the males get more than the females and clearly flocks of them belonged to the Achaemenid king and even to one of his wives, Irtašuna. *Basbas* has thus been interpreted by some as 'peacock', the exotic Indian bird (see PEACOCK no. 1), but chickens (especially junglefowl) would suit the bill equally well. The male junglefowl with its rich red and gold feathers is every bit as impressive as the peacock and with its aggressive behaviour it could well stand to represent kingship. In PF 280 a *basbas* is described as 'Egyptian', suggesting that the bird was imported into Iran from that important satrapy to the west. The junglefowl was certainly an exotic feature of pharaonic menageries (above) and it is possible that the Persians came to know them via Egypt, although India must also have been a source.

On balance *basbas* is perhaps best translated 'chicken' (compare the Hebrew *barburim*, lit. 'fowl' and the Arabic *birbir*). The bird certainly appears in glyptic art of the Greco-Persian school – one seal image shows aggressive fighting cocks while another depicts a rearing, strutting rooster

(Boardman 1970: pl. 861, 875) – and several Achaemenid seals from Iran depict pairs of cockerels in combat, suggesting that perhaps cockerels were valued in Persia for this sport, and only later did they become used in more utilitarian ways (see Merrillees 2005: 134). The Achaemenid-period ‘Tomb of the Harpies’ from Xanthos (c. 470 BCE) depicts fighting cocks, suggesting that the red junglefowl had reached the Greek-speaking world by the early fifth century BCE (see below). A text from Babylon uses the image of fighting cockerels to evoke the image of civil strife: ‘[the prince] and chief officers will roam (the) streets like fighting-cocks’ (Lambert 1960: 113).

5. The Persian bird

Attic black-figure amphora, New York Metropolitan Museum of Art 56.171.16, c. 560 BCE (Fletcher Fund, 1956). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: It can be difficult for a modern audience, to whom the chicken is so familiar, to understand the exotic nature of the fowl to the archaic Greeks. The many representations of cocks in Greek art, particularly vase-painting, go some way to showing us how extraordinary they seemed, with their variegated red and gold plumage, upright crest and wattles, and luxuriant tail feathers. The artist here has not only picked out the birds' different colours in added red and white paint, but has given them different variegations of colour. The chicken's alternative name in Greek, '*ho Persikos ornīs*', the Persian bird (Cratinus fr. 279), indicates that it entered Greece from the East: Aristophanes (*Birds* 481–7) compares its upright crest to the upright tiara worn by the Persian king.

The cock appears in Greek art earlier than the bird itself was imported: it was first depicted by Corinthian painters in the seventh century, in the Eastern-inspired animal style of ProtoCorinthian vase-painting, taking its place alongside similar exotic animals like the lion and panther (Amyx 1988: 669, referencing Payne 1931: 75–6, a study which has not been superseded). From Corinth it spread rapidly into other regional styles (Boardman 1998: figs. 322, 345, 412, 425, 476), and Attic vase-painters adopted the motif from the mid-sixth century, depicting most often paired fighting cocks, as on this example, on cups and large pots. In many cases the birds' combat is compared with human warfare: the other side of this amphora depicts two warriors in combat, and on other examples a small scene of cocks fighting over a hen complements a larger scene of warriors fighting before women (Csapo 1993: 10 and n. 45). A black-figure hydria in Leiden (PC 47) even gives personal names to the cocks and hens it depicts: a pair of cocks on one side are named as Chaitos and Pelkos, and a cock and hen on the other as Chaitos and Sphekis.

6. Chicken husbandry

Varro De Re Rustica III.9.4–16, 19–21

Whoever wishes to have a complete poultry farm should naturally procure all three kinds of fowl [i.e. domestic fowl, wild fowl and African fowl (= guinea fowl)], and particularly domestic fowl. He should choose hens which are particularly fertile, which have red feathers, black wings, toes of uneven length, a large head with an upright crest, and a full body: these are the most fertile type. The best cocks for breeding are muscular, with a bright red comb, a short but wide and sharp beak, grey or black eyes, red or whitish wattles, a neck of varied or golden colour, feathery thighs, short legs, long claws, a long tail and thick feathers; likewise one should choose those which strut about and crow regularly, are tenacious in combat, unafraid of predators and willing to fight in defence of their hens. The Tanagran, Melic and Chalcidian breeds should be avoided, because while they are undoubtedly beautiful and very suited for fighting, they are poor layers.

For a flock of 200 chickens, an enclosure should be made with two large connected hen-houses, facing east, each about ten feet long, about half that in width and a little less in height: they should have windows three feet wide and four feet high, covered with a lattice which allows plenty of light to enter but keep out creatures which prey on hens. Between the two hen-houses should be a door for the *gallinarius* to go in and out. Inside the houses perches should be constructed, sufficient for all the hens, and opposite the perches, nest boxes should be made in the wall. In front of the houses there should be a yard in which the hens can run in the daytime and bathe in the dust. There should besides be a large room for the *gallinarius* to live in, its surrounding walls completely filled with nest boxes, either built into the wall or firmly fixed to it, for movement,

when a hen is brooding, is harmful. When the hens are laying, chaff should be spread in the nest-boxes, and once the eggs have been laid, the old chaff should be replaced with new, since lice and other parasites breed in it and make the hens restless, which leads to the eggs maturing unevenly or going stale.

It is recommended that hens not be allowed to brood more than twenty-five eggs, even if, being fertile, they lay more, and that the best period for laying is from the spring to the autumn equinox. Thus eggs laid before or after this period, or even at its very beginning, should not be set, and those which are set should be put under older hens rather than pullets or those with sharp beaks and claws: pullets are better put to laying than to breeding. They lay best in their first or second year. [. . .] The hens should be shut up to brood day and night, apart from in the morning and evening when they are given food and drink.

The *gallinarius* should go around every other day or so and turn the eggs, so that they are evenly warmed. They say that one can tell whether eggs are fertile by immersing them in water, since an empty egg floats and a full one sinks; but those who say that you can tell by shaking the egg are in error, since this disorders the lifegiving veins in them. They also say that if one holds an egg up to the light, those which are infertile are transparent. Those who wish to keep eggs for a long time treat them with fine salt or brine for three or four hours, wash them and pack them in bran or chaff. They take care to set an uneven number of eggs beneath the hen. The *gallinarius* can tell whether an egg which is being brooded contains an embryo or not after four days, by holding it up to the light: he should throw away any which are translucent and replace them with fresh eggs.

Once the chicks have hatched out they should be taken from their separate nests and given to those hens which have few chicks; if there are some eggs left unhatched, the chicks should be taken and put under other hens which are no longer brooding and which have fewer than thirty chicks. A brood should not be any larger than this. For the first fifteen days the chicks should be fed each morning on a dusty surface (to prevent their injuring their beaks on the hard earth) pearl barley mixed with cress-seed, ground up beforehand in a little water, so that it does not swell up in their crops; they should not be given water. When they begin to grow feathers on their rump, the lice should be picked off frequently from their head and neck, for they often waste away because of these. Stag's horn should be burnt around the hen-houses to deter snakes, since the scent of these animals can be fatal. In the summer and whenever the weather is mild and sunny the chickens should be driven outside into the sunshine and to the dungheap, where they can flutter about, which makes chicks and hens alike healthy: a net should be spread above to prevent them from flying away and to keep hawks and similar birds from getting in. The hens should be protected from heat and cold, both of which are harmful to them. Once the chicks have grown wing feathers they should be trained to follow one or two hens, so that the rest can be useful for laying rather than bringing up their broods.

...

Of the three kinds of fowl the domestic are most commonly fattened. The hens are shut up in a warm, narrow and dark space, since movement and light are not productive of fattening. . . . Their wings and tail feathers are plucked, and they are fed pellets of barley-meal mixed with darnel flour or linseed, made with sweet water. They are fed twice a day and watched to see that their first meal has been digested before they are given the second. After they have been fed, and their heads cleaned to avoid lice, they are shut up again. This is done for twenty-five days, after which they become fat. Another method is to feed wheat bread soaked in water, mixed with good fragrant wine,

which makes them fat and tender in twenty days. If, when being fattened, the hens refuse to eat because they are surfeited, the amount given to them in the last ten days should be reduced in the same way that it was increased over the first ten days, so that the amounts given on the first and the twentieth days are equal. Pigeons are fattened and made plump in the same way.

COMMENT: Varro's discussion of poultry-keeping is a digested version of Columella's much longer instructions on care, feeding and treatment of chickens (*DRR*.VIII.2–7), which perhaps explains some of its non-sequiturs and abrupt changes of topic: the advice on keeping eggs, in particular, is oddly displaced here. As usual in Varro, the farming techniques described are aimed at the large-scale landowner raising chickens intensively for a nearby market, but Palladius states that every housewife knows how to keep chickens (I.27). The advice given is a mixture of the practical (keeping the nest boxes clean and encouraging the chicken to take dust-baths) and the superstitious (setting an uneven number of eggs beneath the hens). Columella gives additional advice on preventing diseases in chickens, especially 'pip' or infective coryza. The idea of fattening fowl seems to have originated in Delos (Plin. *NH* X.139–40) and was clearly widespread, though Pliny declares it an unnecessary and indulgent practice. Fattening fowl, however, was not necessarily the task of the farmer: a sarcophagus from Ostia carries a relief of a poultry shop, and shows chickens kept in wicker coops for fattening below the counter before sale (illustrated as MONKEY no. 6).

7. The sacred chickens

Livy X.40.2–6, 9–13

[The Roman army prepares to face the Samnites at Aquilonia.] In the third hour of the night, after receiving these dispatches from his fellow consul, Papirius rose silently and sent the *pullarius* to take the auspices. No one in the camp was untouched by the general eagerness for battle; high and low were equally impatient, and general and soldiers could see each other's desire for combat. This eagerness even extended to those in charge of the auguries: for although the sacred chickens did not eat, the *pullarius* announced untruthfully to the consul that they had given a favourable omen by dropping food from their beaks. Papirius, delighted by the good omen, announced that the gods were favourable to their enterprise, and advanced the standards for battle.

...

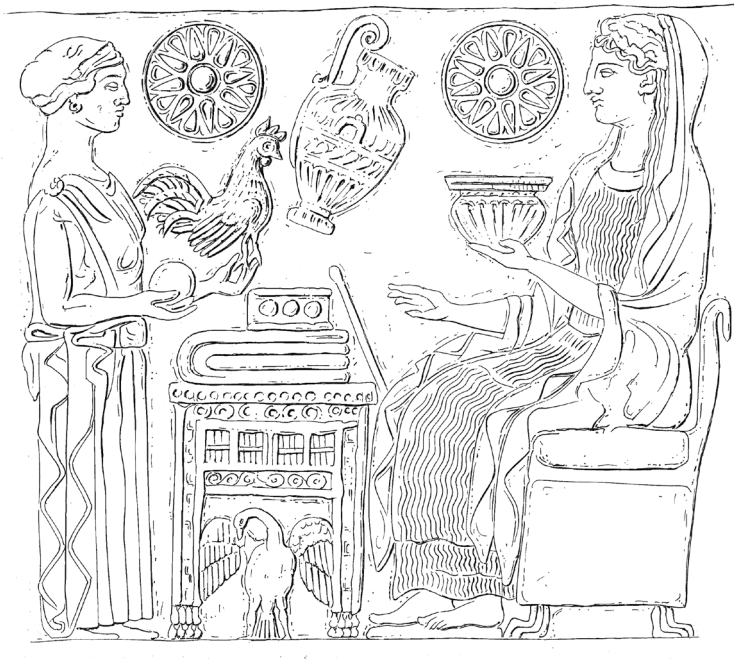
While the generals were making these dispositions, a dispute arose among the *pullarii* about the augury, which was overheard by some of the cavalry; they thought it worth reporting to Spurius Papirius, the consul's nephew, that there was unease about the auguries. The young man, of a generation not yet accustomed to reject divine affairs, investigated the matter to make sure his information was sound, and brought it to the consul's attention. Papirius said, 'I commend your care in this matter; if any of the augurs should make a false report, he will bring divine punishment on himself; as far as I am concerned, I received a favourable omen from the sacred chickens, an excellent auspice for the Roman people and army.' And he ordered the centurions to see that the *pullarii* were stationed in the front line. The Samnites then advanced, their standards followed by their army in impressive array, a magnificent sight even to their enemies. Before the armies could raise the war-cry and engage, the *pullarius* was struck by a spear thrown at random, and fell before the standards; when Papirius heard this, he commented, 'The gods are with us in battle, and he has paid the price for his crime.'

COMMENT: Livy's account of Papirius Cursor's battle against the Samnites in 293 gives us a striking illustration of the role of the sacred chickens in Roman public affairs. Augury taken by observation of the fowl preceded all public actions in early Republican Rome and the role of the *pullarius*, responsible for the augury, is extensively documented (Foti 2011). The form of the augury is explained by Cicero (*De Div.* I.27, II.71–2): the chickens were released from their coop and offered grain to eat, and if they ate eagerly, dropping crumbs to the ground, the omen was favourable. If they refused to eat, or even to leave their coop, it was unfavourable. Cicero comments that one can hardly see divine intervention in a chicken's willingness to eat when it has been previously cooped up unfed, but there are several occasions like the above in which the chickens' refusal to eat caused an inappropriate response, the best-known being the case of Publius Claudius Pulcher in 249 during the First Punic War, who notoriously threw the sacred chickens into the sea when they would not eat, saying 'Then let them drink.' Naturally he was subsequently defeated at the Battle of Drepanum (Cic. *ND* II.7; Suet. *Tib.* 2.2).

The choice of the chicken as a tool of divination related not so much to any divine symbolism as to its adaptability to being caged and transported as required: clearly chickens travelled with Roman armies, even by sea, and a first-century BCE funerary inscription dedicated by the *pullarius* Atimetus to his patron Marcus Pompeius Asper depicts the wicker coop in which they were carried (CIL 14. 2523; Foti 2011: figs 4–6). Atimetus himself, as a freedman, could not have been an augur in the military, thus indicating that augury by sacred chickens was carried out in private too (Wheeler 2008).

8. The chicken as sacrifice

Terracotta pinax, Tarentum 3, from Lokri (drawing by Tessa Rickards after Prückner 1968: pl. 7 no. 6)



COMMENT: A rare series of terracotta *pinakes* (plaques) found in the sanctuary of Persephone at Locri in southern Italy gives us a detailed insight into the cult of Persephone and Aphrodite in the fifth century BCE. The pinakes illustrate different aspects of worship, from earthly scenes of sacrifice and dedication to mythological representations of the rape of Persephone. Among the unusual features of this cult is the prominence of the chicken as sacrificial animal: it appears more frequently as an offering than any other animal, and is also depicted being held by the goddess as one of her distinctive attributes (e.g. Prückner 1968: fig. 7 and pls. 6.1, 10.3, 22.1, 25.5, 26.4). Sourvinou-Inwood (1991: 159) suggests that the chicken's lively sexuality made it a symbol of marriage, appropriate in this cult, but its frequent depiction with Persephone points instead to a role as a liminal creature, guardian of the transition from day to night, and hence of rites of passage; it was certainly in this role that the cock was adopted into Christian iconography (Baird 1983).

As an introduced animal, the chicken played no other role in classical Greek religion: Socrates' famous request that his friends dedicate 'a cock to Asclepius' (Plat. *Phaed.* 118a) is something of a red herring, since this is the only classical reference to the sacrifice of a chicken, all other evidence being later. Not until the Hellenistic period, when it was more widely farmed, did it begin to appear as a sacrificial animal, often a usefully inexpensive one (Her. IV.11–18).

Bibliography

- D.A. Amyx, *Corinthian Vase Painting of the Archaic Period* (Berkeley 1988).
 W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 L.Y. Baird 'Christus gallinaceus: a Chaucerian enigma', *Studies in Iconography* 9 (1983), 19–30.
 J. Boardman, *Greek Gems and Finger Rings. Early Bronze Age to Late Classical* (Oxford 1970).
 J. Boardman, *Early Greek Vase Painting, 11th–6th Centuries BC: a handbook* (London 1998).
 D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals. The Egyptian Origins* (Warminster 1994).
 E. Chaline, *Fifty Animals that Changed the Course of History* (Newton Abbot 2011).
 M. Cocker, *Birds and People* (London 2013).
 E. Csapo, 'Deep ambivalence: notes on a Greek cockfight (Part I)', *Phoenix* 47 (1993), 1–28.
 T.A. Forti, *Animal Imagery in the Book of Proverbs* (Leiden 2008).
 G. Foti, 'Funzioni e caratteri del 'Pullarius' in età repubblicana e imperiale', *ACME* 64 (2011), 89–121.
 R.T. Hallock, *Persepolis Fortification Tablets* (Chicago 1969).
 B. Hesse and P. Wapnish, 'An archaeozoological perspective on the cultural use of mammals in the Levant', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 457–91.
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 O. Keel and T. Staubli, *Les animaux du 6ème jour. Les animaux dans la Bible et dans l'Orient ancien* (Lausanne 2003).
 A. Kozloff, D.G. Mitten and M. Sguaitamatti, *More Animals in Ancient Art from the Leo Mildenberg Collection* (Mainz am Rhein 1986).
 C.M. Kraay, *Archaic and Classical Greek Coins* (Berkeley and Los Angeles 1976).
 W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960).
 P.H. Merrillees, *Catalogue of the Western Asiatic Seals in the British Museum* (London 2005).
 A.J. Parker, 'The birds of Roman Britain', *OJA* 7 (1988), 197–226.
 A. Parmelee, *All the Birds of the Bible* (London 1960).
 H. Payne, *Necrocorinthia: a study of Corinthian art in the archaic period* (Oxford 1931).
 J.P. Peters, 'The cock in the Old Testament', *Journal of Biblical Literature* 33.2 (1914), 152–6.
 E. Porada, 'A subject for continuing conversation' in J.V. Canby (ed.), *Ancient Anatolia: aspects of change and cultural development. Essays in Honour of Machteld Mellink* (Madison 1986), 84–92.
 A. Potts, *Chicken* (London 2012).
 H. Prückner, *Die lokrischen Tonreliefs. Beitrag zur Kultgeschichte von Lokroi Epizephyrioi* (Mainz 1968).
 R. Sallares, *The Ecology of the Ancient Greek World* (Ithaca, NY 1991).
 J. Scurlock, 'Animals in ancient Mesopotamian religion', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 361–403.
 D. Serjeantson, *Birds* (Cambridge 2009).

- C. Sourvinou-Inwood, *'Reading' Greek Culture: texts and images, rituals and myths* (Oxford 1991).
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 C. Tuplin, *Achaemenid Studies* (Stuttgart 1996).
 E.L. Wheeler, 'Pullarii, Marsi, haruspices and sacerdotes in the Roman imperial army', in H.M. Schellenberg et al. (eds), *A Roman Miscellany: essays in honour of Anthony R. Birley* (Gdansk 2008), 185–201.
 F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

DOVE/PIGEON

The words 'dove' and 'pigeon' are largely interchangeable. Of the family *Columbidae*, 'dove' tends to be used for small wild pigeons, while 'pigeon' refers to a wide variety of rock doves commonly seen in town and cities. Seven members of this family were commonly found in antiquity: the Rock Dove, Ring Dove and Turtle Dove of the genus *Columba*, and the Turtle Dove, Collared Dove, Laughing Dove and Palm Dove of the genus *Streptopelia*. The Rock Dove is the sole ancestor of all domestic pigeons in Europe, Asia and North Africa; a medium-sized bird with a variety of pleasing subtle colours in its plumage, it nests on cliff faces, a trait inherited by modern pigeons which roost on the ledges of high buildings.

Pigeons have probably always inhabited human cities and they are certainly attested in the urban centres of Mesopotamia around 5000 BCE in the Halafian period (Zeuner 1963: 461; Chaline 2011: 62; O'Connor 2013: 101–7). First domesticated as a source of food, doves and pigeons were soon recognised to have homing instincts making them easy to breed in captivity and train to carry messages (Zeuner 1963: 462). Doves were exceptionally important in the religious rituals of the Near East and they are attested time and again throughout Mesopotamia, the Levant and Egypt as sacrificial offerings. Unsurprisingly, because of its omnipresence in daily life, the habits and nature of the dove were transformed into a myriad of literary metaphors (Kramer 1969; Allen 2009). Given that the dove's display of affection is striking (mating doves remain close to one another for life), its role as a symbol of love, desire and fertility was particularly important. The ancient Israelites embraced the image of the faithful dove and readily employed it in their poetry, wisdom literature and proverbs (Song of Songs 1.15, 41; 2. 12, 14; 5.2; 6.9; Nehemiah 2.7; see further no. 1 below and Exum 2005), a feature which was embraced by early Christianity together with the potent symbol of the 'dove of peace' (Allen 2009: 72–7). In other ancient cultures the dove became a potent image for goddesses of sex and desire (below no. 3).

Although they knew of a wide variety of doves, judging from the wall paintings, the ancient Egyptians kept two species of dove for domestic use – the Laughing Dove and the Turtle Dove (in Egyptian all doves and pigeons were simply termed *mnw* or *a'sa*). These they employed to stock their aviaries and to provide meat for the table (Darby, Ghalioungui and Grivetti 1977 (I): 286–91), although doves proper were not common until the Ptolemaic period. The Turtle Dove was most commonly used for cooking (it excels the pigeon in terms of flavour). If the tomb and temple reliefs are to be trusted (since these frequently show the creature being carried by offering bearers) then the Turtle Dove was the offering of choice (Houlihan 1986: 106, fig. 152): remains of four Turtle Doves were even found in the queen's chambers in the pyramid of Amenemhet III of the XII Dynasty at Dashur. Today the pigeon and dove are popular foods in Egypt where they are generally roasted and stuffed with emmer or barley, sometimes mixed with nuts and raisins, and the birds were possibly enjoyed this way in antiquity too (Ikram 1995: 28).

Characterised as gentle, faithful and nurturing, the dove was singularly popular in Greece and Rome, living alongside people on farms and in cities in great numbers. Domestic pigeons had been known since early times and their habits were well documented and understood; many

variants of pattern and plumage are shown in Roman paintings (Watson 2001: 372–4). Aristotle recognised three other species of wild dove, the *phatta*, woodpigeon, the *trygon*, turtle dove, and the *oinas*, rock dove (HA 593a 15–16). Farmed doves were a useful source of meat and fertiliser, but there are many references to doves as pets: they were admired for their gentle nature and their plumage – Sosus’ famous mosaic of doves perching on a basin of water was imitated across the Roman empire (Plin, NH XXXVI.184; Tammisto 1997: 73–7). Yet ancient appreciation for the qualities of the dove as a pet existed alongside a high level of casual cruelty: doves were blinded to use as decoys in hunting (HA 613a 22–3), had their legs broken as they were fattened for eating (below no. 4) and were taken from their young to act as homing birds (below no. 3). White doves were often associated with divinity, though they were not favoured for farming, part of a general ancient suspicion of white or particoloured animals (Col. *De Agri*. VIII.8.9).

1. Israelite ornithology: observing doves in the Hebrew bible

a) *Genesis 8.6–12*

After forty days Noah opened a window he had made in the ark and sent out a raven, and it kept flying back and forth until the water had dried up from the earth. Then he sent out a dove to see if the water had receded from the surface of the ground. But the dove could find nowhere to perch because there was water over all the surface of the earth; so it returned to Noah in the ark. He reached out his hand and took the dove and brought it back to himself in the ark. He waited seven more days and again sent out the dove from the ark. When the dove returned to him in the evening, there in its beak was a freshly plucked olive leaf! Then Noah knew that the water had receded from the earth. He waited seven more days and sent the dove out again, but this time it did not return to him.

b) *Psalms 55.6, 68.13, 74.19*

I said, ‘Oh, that I had the wings of a dove! I would fly away and be at rest. . .’

Even while you sleep among the sheep pens, the wings of my dove are sheathed with silver, its feathers with shining gold. . .

Do not hand over the life of your dove to wild beasts; do not forget the lives of your afflicted people forever.

c) *Song of Songs 2.12, 14*

Flowers appear on the earth; the season of singing has come, the cooing of doves is heard in our land . . . My dove in the clefts of the rock, in the hiding places on the mountainside, show me your face, let me hear your voice; for your voice is sweet, and your face is lovely.

d) *Isaiah 38.14, 59.11, 60.8*

I cried like a swift or thrush, I moaned like a mourning dove. My eyes grew weak as I looked to the heavens. I am being threatened; Lord, come to my aid! . . . We all growl

like bears; we moan mournfully like doves. We look for justice, but find none; for deliverance, but it is far away . . . Who are these that fly along like clouds, like doves to their nests?

e) Jeremiah 8.7, 48.28

Even the stork in the sky knows her appointed seasons, and the dove, the swift and the thrush observe the time of their migration. But my people do not know the requirements of the Lord . . . Abandon your towns and dwell among the rocks, you who live in Moab. Be like a dove that makes its nest at the mouth of a cave.

f) Hosea 7.11, 11.11

Ephraim is like a dove, easily deceived and senseless—now calling to Egypt, now turning to Assyria . . . ‘They will come from Egypt, trembling like sparrows, from Assyria, fluttering like doves. I will settle them in their homes,’ declares the Lord.

COMMENT: The most common Hebrew term for ‘dove’ is *yona* (thus the Book of Jonah is named for the bird, since Yona was also used as a personal name). The words *tor* and *gozal* are also employed (Parmelee 1959: 65). Biblical authors were clearly very familiar with doves and pigeons – in fact they are mentioned more than any other birds in the bible with some twenty-nine citations. Observations on their natural behaviour and appearance are plentiful, with authors noting the fine and subtle colouration of their feathers, their flight patterns and roosting habits (on cliff-faces and at the mouth of caves), their reticence, their calls and coos, and even their usefulness to mankind. The dove’s vocalisation, for instance, led some people to speculate that the bird sounded as though it was mourning, while others heard the dove’s mournful sound as linked to romance, since the cooing of a dove signals the arrival of spring and the earth’s fecundity. Egyptian love poems employ similar imagery: ‘The voice of the dove is calling / It says: “It’s day! Where are you?”’ (Papyrus Harris 500). The Egyptians clearly found the cooing of the dove had a pleasant soporific effect, an almost dreamlike quality: ‘may the doves awaken you when you are asleep . . . may they awaken your head at your pillow’ (lit. ‘at the horizon’; *The Book of the Dead* 166 – ‘Chapter of the Headrest’).

Other Near Eastern civilisations shared the Hebrew interest in the dove. A Sumerian husband lamenting the death of his wife moans ‘like a dove in its hole’ and thrashes about ‘like a dove in terror’; the god Sulgi boasts of flapping his arms ‘like a dove hysterically fleeing a snake’ (Kramer 1969: 7). The timid behaviour of doves was proverbial and their role as prey to other predatory birds was often highlighted: the Egyptian pharaoh Ramses III is described in a Medinet Habu inscription as raging ‘like the hawk among the little birds and the doves’ (Breasted 1906: §106).

The famous story of Noah’s ark gives the dove the spotlight, as it is sent out from and returns to the ark three times, the second time holding a sprig of olive, thereby announcing to the world that the flood waters were abating. The dove’s behaviour led Jews and Christians to bestow the bird with the admirable characteristics of loyalty, trustworthiness and even the symbolism of divine love (a dove hovers above the head of Jesus following his baptism in Matthew 3.16; see also Mark 1.9 and Luke 3.22). But in the Sumerian saga of the great flood contained in the *Epic of Gilgamesh* the dove’s role is less exalted since it is just one of three birds (alongside the sparrow and the raven) sent out to test the water level. Here it is the raven which gets the accolade: ‘The raven went away and when she saw that the waters had abated/She ate, she flew about, she cawed (and) did not return’ (*Gilgamesh* 8. 153–4).

Doves and pigeons were also used to carry messages. Inscriptions at Ramses III's mortuary temple at Medinet Habu in Thebes commemorate the pharaoh's coronation and record the fact that four doves were 'dispatched to the four corners of the horizon to confirm that the living Horus, Ramses, is in possession of his throne, that the order of Ma'at prevails in the cosmos and society' (Zeuner 1963: 462; Murnane 1980: 38). He is also recorded offering 6,510 dove-sacrifices to the temple at Karnak (see further below).

2. Breeding and sacrificing doves in Jewish ritual and life

a) Hebrew bible, Leviticus 1.14, 5.7, 11, 12.6

If the offering to the Lord is a burnt offering of birds, you are to offer a dove or a young pigeon.

Anyone who cannot afford a lamb is to bring two doves or two young pigeons to the Lord as a penalty for their sin—one for a sin offering and the other for a burnt offering.

If, however, they cannot afford two doves or two young pigeons, they are to bring as an offering for their sin a tenth of an *ephah* of the finest flour for a sin offering. They must not put olive oil or incense on it, because it is a sin offering.

When the days of her purification for a son or daughter are over, she is to bring to the priest at the entrance to the tent of meeting a year-old lamb for a burnt offering and a young pigeon or a dove for a sin offering.

b) New Testament, Luke 2.22–4

When the time came for the purification rites required by the Law of Moses, Joseph and Mary took him to Jerusalem to present him to the Lord – as it is written in the Law of the Lord, 'Every firstborn male is to be consecrated to the Lord', and to offer a sacrifice in keeping with what is said in the Law of the Lord: 'a pair of doves or two young pigeons.'

John 2.14–16

In the temple courts (Jesus) found people selling cattle, sheep and doves, and others sitting at tables exchanging money. So he made a whip out of cords, and drove all from the temple courts, both sheep and cattle; he scattered the coins of the money changers and overturned their tables. To those who sold doves he said, 'Get these out of here! Stop turning my Father's house into a market!'

COMMENT: Doves and pigeons were sacrificed with disquieting regularity by the ancient Israelites (a practice reaching back at least to the age of Abraham (Genesis 15.9)). They were the essential offerings for the purification of parturient women (Leviticus 12.6), as well as individuals suffering from venereal diseases (Leviticus 15.14, 30), and of Nazirites (people who had taken a vow of abstinence) who had been polluted by the presence of a corpse (Numbers 6.10). It was also permitted to allow doves and pigeons to act as substitutes for expensive livestock in the temple burnt offerings (Leviticus 5.7; 12.8; 14.21–2) and the purification offerings (Leviticus 5.7;

14.21–2). But even these simple bird-offerings might prove to be too expensive for the very poor in Israelite society, so Hebrew law allowed the destitute to give a grain offering in place of a live offering (Leviticus 5.11). It is probable, therefore, that doves and pigeons were readily obtainable and were comparatively inexpensive. In fact, to cut down on the expense of buying sacrificial birds (clearly on sale within the holy sanctuary in the Second Temple period according to John 2.14–16), the birds could have been bred within the domestic sphere. Isaiah's comment that doves 'fly along like clouds . . . to their nests' (Isaiah 60.8) suggests that the birds were domesticated, and Iron Age bone evidence from Jerusalem strongly supports the idea that domestic birds were consumed by inhabitants of the city. After all, doves and pigeons were considered 'clean' since they eat only seeds, fruits and greens and were therefore suitable for both eating and sacrifice (Allen 2009: 68). 2 Kings 6.25 recounts how, during the siege of Samaria, the city's inhabitants were forced to eat asses' heads and doves' dung, which was sold for five shekels of silver for a quarter of a *kab*. Translations of this passage vary considerably; 'seed pods', 'falafel', 'locust beans' and 'wild onions' have been suggested as a substitute to 'doves' dung' (Robinson 1976: 65–6). But it is feasible that the extreme conditions of a siege could have led to the people of Samaria eating dung, as suggested by Josephus in his description of the siege of Jerusalem in 70 CE (*War* V.13). Even in peace time Josephus (*Ant.* XI.62) insists that doves' dung could be used as an alternative to salt.

During the Hellenistic period there is good evidence that doves and pigeons were raised in large, industrial installations such as the subterranean limestone *columbarium* found near Mareshah in southern Israel, dating to the late third century BCE (Kloner 2003). This type of dovecote had been introduced into the Levant from Ptolemaic Egypt and around 1,000 *columbaria* have been discovered in Israel and Palestine dating to the Hellenistic and Roman Imperial periods. It is difficult to know why the Jews began rearing doves on such a large scale in the Hellenistic era, but the industry must have been fuelled by popular demand, and the rise of codified religious practices at this date may be relevant. Rabbinic sources state that doves and pigeons were supplied to the Jerusalem temple (where, as we have seen, they were sold to worshippers as sacrificial offerings) from sources outside the city, and the Mareshah *columbarium* might have served this purpose. The breeding of these birds was profitable since a pair of doves produces three or four broods of offspring a year. Each brood comprises two chicks, both of which can already reproduce within a year. So in a large coop like Mareshah, 1,500 birds (500 reproducing pairs) could feasibly generate 3000–4000 marketable offspring every year. This lucrative production-line was probably established so as to deliver doves and pigeons for the countless pilgrims arriving in Jerusalem for Passover and the other main festivals of the Jewish ritual year.

3. Reared by doves: the birth-legend of Semiramis

Ctesias F1b = Diodorus Siculus II.1.4–28.7 (Llewellyn-Jones and Robson 2010: 116–17, 130)

Well then, in Syria there is a city called Ascalon, and not far from it is a large, deep lake full of fish alongside which there is a precinct of a famous goddess whom the Syrians call Derceto. She has the face of a woman but, for the following reasons, all the rest of her body is that of a fish. The most learned natives tell the story that Aphrodite took offence at the aforementioned goddess and cast on her a terrible desire for one of those who had come to sacrifice: a young man who was not at all disagreeable. Derceto had sex with the Syrian and gave birth to a daughter; but ashamed at her wrongdoings she did away with the young man and exposed the child in a deserted, rocky place in which a large number of doves was accustomed to nest; and so the baby unexpectedly found

nourishment and a means of salvation. Driven by shame and hunger Derceto threw herself into the lake and the shape of her body changed into that of a fish. Because of this, even to this day the Syrians abstain from this animal and honour fish like gods.

Because a large flock of doves was making their nest around the place where the baby was exposed, the child was unexpectedly and miraculously nourished by them. For some kept the child's body warm by surrounding her on all sides with their wings, while others nourished her by bringing milk in their mouths from nearby stables whenever they saw that the cowherds and the other herdsmen had gone away and dropping it between her lips.

When the child was one year old and in need of food which was more solid, the doves provided her with sufficient nourishment by snipping off bits of cheese. When the herdsmen returned and saw the cheeses had been nibbled all around they were amazed at the strange occurrence. And so they watched closely and when they learnt the reason they found the baby, which was exceptionally beautiful. And so they took her into their dwelling straightaway and gave her as a gift to the attendant of the King's cattle, whose name was Simmas. And since he was childless he reared the child with great care as if she were his own daughter, giving her the name Semiramis: this is a name derived from the word for doves in the Syrian language, which since that time everyone in Syria has continued to honour like goddesses. . .

Some relate the myth that (after her death Semiramis) became a dove and flew away with a number of birds that had flown down into the house; and it is because of this they say that the Assyrians worship the dove as a god, since they thus make Semiramis immortal.

COMMENT: The Greek author Ctesias of Cnidus records a bona fide Eastern legend of the Assyrian queen, Semiramis, who was said to be the daughter of the Syrian (i.e., Assyrian) fish-goddess Derceto (or Atargatis), and whose young life was miraculously preserved by doves, who fed and nurtured her during her infancy. It is an unusual version of the familiar human-raised-by-animals motif (Carroll 1984) and clearly has little to do with the birds' natural habits; this story is pure fantasy. Nevertheless, underlying Ctesias' tale is the link between the dove and the great sex goddesses of antiquity – his Semiramis is of divine stock after all. His claim that her name is derived from the Assyrian word for 'dove' is, however, stretched. The Assyrian *summatum* is 'dove', but it is quite a challenge to connect Semiramis or, for that matter her Akkadian name, Sammuramat, with *summatum* (for her name and more in general on Semiramis and the animal world see Capomacchia 1986).

In the Near East the dove was the symbol *par excellence* of the goddesses Ishtar, Astarte, Asherah, Tanit and many others, and in the Classical period the association continued with Aphrodite and Venus (Walker 1983: 253–4). Images of doves were used to designate the sanctuaries of love goddesses: at Babylon the doorway of the temple of Nimah was adorned with the image of a dove and a ninth-century clay model of a temple to an unnamed Levantine goddess (found in Palestine) had a dove prominently placed over the doorway (Keel 1994: fig. 57). At Beth-Shan in Israel the remains of an Astarte temple contained small shrines with dove figurines (Pope 1977: 400). In a painted fresco from Mari, an oversized dove emerges from a palm tree in the temple of Ishtar, demonstrating that the dove could act as a 'stand in' for the goddess (Keel 1994: 106; see also du Mesnil du Buisson 1973: 80 for a Canaanite example). Unsurprisingly, the dove's close connection to eroticism made it a powerful ingredient in love magic and medicine (Pope 1977: 400).

4. Sacred doves at Aphrodisias

Reynolds, Aphrodisias and Rome no. 46, first century CE

Tiberius Catius Asconius Silius Italicus, proconsul, announces: since there are decrees in existence which forbid anyone to catch, keep, chase or [...] the [doves] in the city and [...] of the cult concerning the goddess [...]

COMMENT: Greek worship of Aphrodite was greatly influenced by the Eastern cults of Astarte and Ishtar (as noted above), and the sacred doves are a clear example of this influence. This Roman inscription, from Aphrodisias in Caria, shows that the city was full of doves protected because they were sacred to the goddess: although the word ‘peristera’ is missing from the inscription, the restoration is secure in the context of Philo’s description of the sacred doves at Askalon, which were similarly protected (Euseb. *PE* 8.14). Other flocks of sacred doves are recorded at Paphos, the birthplace of Aphrodite (Mart. *Ep.* 8.28.13), and Eryx on Sicily, where Aelian describes the festivals celebrated at the departure and return of the sacred doves (*NA* IV.2). Were the sacred doves white? Sacred animals often were (see *MOUSE* no. 3): Aelian (*NA* X.33) says that white turtle-doves were sacred to Aphrodite and Demeter, and Ovid that white pigeons were sacrificed to Venus (*Fasti* I.451–2), but not all of the doves depicted in art with Aphrodite or Venus are white. Aelian in fact speaks of a special ‘rose-coloured’ dove which leads Aphrodite’s flock back to Eryx.

5. Early carrier pigeons

Aelian Varia Historia 9.2

There is a story that the news of the victory of [the athlete] Taurosthenes at Olympia was brought to his father in Aegina on the same day by an apparition. Others say that Taurosthenes took a pigeon with him when he set out, taking her from her young, which were newly-hatched and without feathers, and when he had won the victory he set her free, having tied a piece of purple cloth to her body. In her eagerness to return to her brood the pigeon made the journey from Pisa to Aegina in a single day.

Frontinus Stratagems 3.10.8

The same [Hirtius, when Decimus Brutus was under siege by Antony at Mutina] would take pigeons, which he had previously kept shut up in the dark without food, tie messages to their necks with a hair, and let them fly from a place as close to the city walls as he was able. The pigeons, eager for light and food, made for the tallest buildings where Brutus was able to catch them, and in this way he was kept abreast of events, particularly after he began to tempt the pigeons to fly down to him by leaving feed in different places for them.

COMMENT: References to the use of messenger pigeons are scattered through Greek and Roman sources, from the fifth-century Attic comedian Pherecrates (fr. 38) onward: these are the two most detailed accounts. Taurosthenes’ victory can be dated to 444 BCE (Pausanias VI.9.3), while the siege of Mutina took place in 43 BCE. Neither, however, is evidence for an organised system of homing pigeons carrying messages: in Frontinus’ example above, the pigeons simply behave naturally, settling on a perch in the city where they can be tempted down by the recipient

of the message. The story is unique in Roman history, and Pliny (*NH* I.110) tells a slightly different version in which the pigeons were sent from Brutus in the city to Hirtius' camp with messages tied to their feet, the variations implying that pigeon-post was not a standard practice. Taurosthenes in Aelian's story certainly exploits the homing instinct of the pigeon which returns to its native island, but quite how his father was to find this particular bird remains unexplained unless it was a domestic pigeon. The choice of pigeon for this purpose undoubtedly related to their relatively large size, allowing them to carry a message, and their willingness to live alongside humans rather than heading for the wilds.

6. Dovecotes

Roman-period dovecote at Karanis, Egypt: view of the inside of the eastern wall of the dovecote, C65Ba and a portion of Bb (neg. no. KM 5.3489). Photograph courtesy of The Kelsey Museum of Archaeology, University of Michigan



COMMENT: The dovecote (*peristerion* or *columbarium*) was a common feature of both farms and townhouses in the Roman period: few have survived intact as they were usually built in upper storeys or towers, but the Greco-Roman town of Karanis in the Egyptian Fayoum has several well-preserved examples (Husselman 1953). As described in agricultural handbooks (Col. *De Agri.* VIII.8–9), the dovecote was constructed in the form of a tower with pottery jars set horizontally into the walls as nesting-boxes. Varro (*Rust.* III.7.4) describes how a wooden shelf was set below each row of boxes for feeding and perching, and a bottom row of more accessible

larger niches was used for fattening young pigeons (squabs). The squabs were fattened for sale in the same way as poultry, and both Columella and Varro advise the keeper to break the birds' legs to prevent their moving about (Col. VIII.8.11–12; Varr. III.7.10). The dovecote also provided a source of guano for fertiliser.

Most cotes seem to have housed free-flying doves which foraged for themselves through the day, though Columella comments that one could not keep free doves near a city, as they would be snared for food (VIII.8.2). Many of the *peristeria* found at Karanis are very large, containing more than a thousand nesting boxes, and must therefore represent commercial enterprises producing birds for sale (Husselman 1953: 84–6). Much smaller *peristeria* are referred to in literature: Juvenal (III.201–2) speaks of doves which nest under the eaves of houses, and Toynbee (2013: 258) mentions an inscription from Dama in Syria describing a *peristerion* built over the tomb of a pigeon-lover.

7. The Holy Spirit as a dove

*Mosaic from the Baptistry, Orthodox Cathedral, Ravenna,
fifth century CE (drawing by Tessa Rickards)*



COMMENT: The dove of the Old Testament remained a significant animal in the New, most particularly as the embodiment of the Holy Spirit. According to the Synoptic Gospels (Matthew 3.16; Mark 1. 9; Luke 3.22) at the baptism of Christ the Holy Spirit descended in the form of a dove, and it is depicted as a white dove in the earliest Christian art (Grabar 1980: 122–3). Figure 2.65 depicts the dove descending from heaven as John the Baptist baptises Christ, with a personification of the River Jordan looking on. The existing positive associations of the dove in Roman thought, as a symbol of marital fidelity and gentleness, undoubtedly helped in its adoption as a Christian symbol, although as Gilhus (2006: 173) notes, the dove in this case is not simply an allegory – the aspect of the divine takes on the actual form of a dove. The mosaic illustrates the continuity between Greco-Roman myth and Christianity in both the presence of the river-god, and the idea of the divine embodied as a bird, just as gods in Greek mythology took the form of birds; Gilhus also notes the long tradition in the Near East which sees the dove as a sacred bird and even as an incarnation of the divine. The dove remained the canonical way of representing the Holy Spirit in Christian art throughout the medieval period: unlike other symbols, it was not replaced with a human allegory.

Bibliography

- B. Allen, *Pigeon* (London 2009).
 W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 J. H. Breasted, *Ancient Records of Egypt, Vol. IV* (Chicago 1906).
 L.R. Brody, 'The cult of Aphrodite at Aphrodisias in Caria', *Kernos* 14 (2001), 93–109.
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 A.M.G. Capomacchia, 'Semiramis. Una femminilità ribaltata', Roma (1986), 57–9.
 M.P. Carroll, 'The folkloric origins of modern "animal-parented children" stories', *Journal of Folklore Research* 21.1 (1984), 63–85.
 E. Chaline, *Fifty Animals that Changed the Course of History* (London 2011).
 W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London and New York 1977).
 J.C. Exum, *Song of Songs* (Louisville 2005).
 I.S. Gilhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
 A. Grabar, *Christian Iconography: a study of its origins* (ed², London 1980).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 E.M. Husselman, 'The doves of Karanis', *TAPA* 84 (1953), 81–91.
 S. Ikram, *Choice Cuts. Meat Production in Ancient Egypt* (Leuven 1995).
 S. Ikram, *Beloved Beasts: animal mummies from ancient Egypt* (Cairo 2006).
 O. Keel, *The Song of Songs* (Minneapolis 1994).
 A. Kloner, *Maresha Excavations Final Report I: subterranean complexes 21, 44, 70* (Jerusalem 2003).
 S.N. Kramer, 'Sumerian similes: a panoramic view of some of man's oldest literary images', *Journal of the American Oriental Society* 89.1 (1969), 1–10.
 L. Llewellyn-Jones and J. Robson, *Ctesias' History of Persia. Tales of the Orient* (London 2010).
 R. du Mesnil du Buisson, *Nouvelles études sur les dieux et les mythes de Canaan* (Leiden 1973).
 W.J. Murnane, *United with Eternity: A Concise Guide to the Monuments of Medinet Habu* (Chicago/Cairo 1980).
 J. Oakley, 'Death and the child', in J. Neils and J.H. Oakley, *Coming of Age in Ancient Greece: images of childhood from the classical past* (Yale 2003), 163–94.
 T. O'Connor, *Animals as Neighbors. The Past and Present of Commensal Species* (East Lansing 2013).
 A. Parmelee, *All the Birds of the Bible* (London 1959).
 M.H. Pope, *Song of Songs* (New York 1977).
 J. Reynolds, *Aphrodisias and Rome* (London 1982).
 J. Robinson, *The Second Book of Kings* (Cambridge 1976).
 A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 B.G. Walker, *The Woman's Encyclopedia of Myths and Secrets* (New York 1983).

G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.
F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

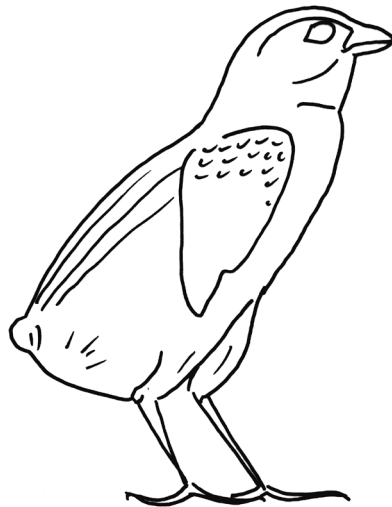
QUAIL

Quail are the smallest members of the family *Phasianidae* which includes partridges, pheasants and peafowl; they are birds of open grassland, eating plant seeds and insects, and more at home on the ground than in the air. The common quail (*Coturnix coturnix*) is migratory, wintering in central Africa and moving north in spring to breed in Europe and western Asia. It is plain from the ancient sources that migrating quail were hunted as a food resource in the Mediterranean, a practice which continued well into the modern period; as late as the 1920s huge numbers of quail were caught and sold in Egypt. Their numbers in the wild today are very much reduced, both from overhunting and from habitat loss in their summer and winter grounds, though they are successfully raised in captivity for their eggs, a particular delicacy.

The common quail was a very familiar and popular bird in classical Greece: expressing the fifth-century mania for peacocks, Antiphanes says that they are 'more common than quail' (= PEACOCK no. 2). The habits of the quail were well documented by classical authors: feeding and nesting on the ground, fighting and protecting its chicks (Ar. *HA* 613b6–614a34). They were not usually raised for food in Greece – hunting was the main source – but as pet birds for sport. At Rome the farming of quail as a delicacy was more widespread (Varro *De re rust.* III.5). Although its appearance is well described, it occurs relatively little in art (except in Egypt), perhaps as a result of its small size.

1. A fledgling quail

***Relief plaque from Egypt, Late Period or Ptolemaic era, c. 400–30 BCE
(New York, Metropolitan Museum of Art 07.228.8)***



COMMENT: This relief depicts the quail chick hieroglyph, representing the sound/letter 'w'. The hieroglyph is attested in the Early Dynastic period but it is not until the early IV Dynasty that the bird can be identified with any certainty as the common quail (Houlihan 1986: 77). Several of these plaques are known (some depicting swallows and others showing falcons and owls – see OWL no. 3). They are usually interpreted as sculptors' models or as votives, but no scholarly consensus has yet been reached. Whatever the case, the depiction of the young quail is executed with tremendous skill: the artist's observant eye delicately renders the bird's primary wing feathers (which confirm that it is a fledgling of about three weeks of age and not a hatchling), its downy plump body, the patterned stripes on its back, and its spindly legs and long claws. The artist has paid particular attention to the quail's beak, carving it in deeper relief.

It is possible that this exquisite study was taken from a real-life observation of a young quail (Bailleul-LeSuer 2012: 169–70), for quails, after all, were very familiar to the Egyptians who ate them enthusiastically, alongside doves and larks, although they were not bred in captivity (Hdt. II.77; Ikram 1995: 29). Inscribed on a bowl, probably used for funerary offerings, is a 'letter' written by a man named Shepsi to his deceased mother: '[. . .] you said to me, your son, "You shall bring me some quail that I may eat them", and I, your son, brought you seven quails and you ate them. . . .' (Wente 1990: 212).

2. Quails in the wilderness

a) Hebrew bible, Exodus 16.11–15

The Lord said to Moses, 'I have heard the grumbling of the Israelites. Tell them, "At twilight you will eat meat, and in the morning you will be filled with bread. Then you will know that I am the Lord your God."'

That evening quail came and covered the camp, and in the morning there was a layer of dew around the camp. When the dew was gone, thin flakes like frost on the ground appeared on the desert floor. When the Israelites saw it, they said to each other, 'What is it?' For they did not know what it was. Moses said to them, 'It is the bread the Lord has given you to eat.'

b) Hebrew bible, Numbers 11.31–4

Now a wind went out from the Lord and drove quail in from the sea. It scattered them up to two cubits deep all around the camp, as far as a day's walk in any direction. All that day and night and all the next day the people went out and gathered quail. No one gathered less than ten *homers*. Then they spread them out all around the camp. But while the meat was still between their teeth and before it could be consumed, the anger of the Lord burned against the people, and he struck them with a severe plague. Therefore the place was named Kibroth Hattaavah, because there they buried the people who had craved other food.

c) Hebrew bible, Psalm 78.24–31

He rained down manna for the people to eat,
he gave them the grain of heaven.
Human beings ate the bread of angels;
he sent them all the food they could eat.
He let loose the east wind from the heavens

and by his power made the south wind blow.
He rained meat down on them like dust,
birds like sand on the seashore.
He made them come down inside their camp,
all around their tents.
They ate till they were gorged—
he had given them what they craved.
But before they turned from what they craved,
even while the food was still in their mouths,
God's anger rose against them;
he put to death the sturdiest among them,
cutting down the young men of Israel.

COMMENT: One of the best-known incidents during the Israelite exodus from Egypt, the story of the quail (Hebrew, *sēlāw*) in the wilderness is told three times in the Hebrew bible. During the trek from Elim to the Wilderness of Sin, the people, arriving exactly one month after the Exodus, suffer from hunger and clamour against Moses' leadership. They are supplied, by Yahweh, with manna and quails. In fact, the Israelites twice encountered flights of quail, once each at the Gulfs of Suez (Exodus 16.13) and of Aqaba (Numbers 11.31), these birds arriving in the evening. These are precisely the areas and time of day overflowed by migrating quail in the spring, the season applicable to these two biblical references.

The depiction of the 'miracle' in Psalms might be the most poetic, but the account in Numbers is the most detailed. The description stands on a par with that of other ancient writers who have discussed the mass migration of quail (below no. 4), and the biblical account of the ease of quail-catching in nets is echoed in Egyptian wall-paintings, including those of Kagemi of the VI Dynasty at Saqqara and the beautiful tomb of Nebamun from XVIII Dynasty Thebes (Scott 1940; Houlihan 1986: 76–7; Parkinson 2008: 118; see also Hosea 7.12). Al-Qazawi, the fourteenth-century CE Arab author, describes how the inhabitants of El-Arish in northern Sinai routinely encountered and captured between one and two million quails as they migrated across the desert, swept into Sinai from the Gulf of Aqaba (Borowski 1998: 151–5).

The author of Numbers articulates the magnitude of the quail catch in three distinct ways. He alludes to the breadth of the area which the quail covered – a day's journey in each direction (an area of 400 square miles); he measures the quail in terms of height by noting that they flew three feet (two cubits) above the ground or, alternatively, that the dead quail were piled up three cubits high. Finally the author qualifies the quantity of the quail: each person was able to collect ten *homers* (between 38 and 65 bushels) over a two-day period. The excess of quail meant that many were spread out around the Israelite camp to dry in the sun for later consumption. Interestingly, the author emphasises the Israelites' greed in consuming the unprocessed meat and notes that they were struck down with a mass food-poisoning which can only be coturnism, a toxicological syndrome (usually manifested as a viral muscle fatigue) brought on by the eating of quail. The Israelite dead were buried at a place called Kibroth-hattavah, 'Graves of Craving'.

3. Quail-tapping

Pollux Onomasticon 9.109

In the game [of quail-tapping] one man places his quail in the circle, and the other taps it with his forefinger, or plucks a feather from its head, and if the quail stands its

ground, the victory goes to its trainer. But if the quail retreats the man who has tapped or plucked it wins.

Aristophanes *Birds* 1298–9

And Meidias there
Is called the Quail; for he looks like a quail
Which has been rapped on the head with a stick.

COMMENT: Pollux here describes the strange ancient sport of quail-tapping, thus explicating Aristophanes' reference to a 'tapped quail'. Quail-tapping was hugely popular among the leisured class in classical Athens: a champion quail was valued as highly as a fighting cock (Plat. *Lys.* 211e), betting was enthusiastic and much money changed hands. Pollux even notes the term '*ortugomania*', denoting devotion to the pastime. Quail were kept and trained for the purpose: Plato (*Laws* 789b–c) describes how men carried quails about to exercise them, and no doubt to inure them to crowds, and Plutarch (*Alc.* 10) relates an incident in which Alcibiades, addressing the citizens of Athens from the *bema*, forgot that he had a quail in his cloak and allowed it to escape; alarmed by the noise of the crowd, the quail flew away, prompting a scuffle as people chased it.

More straightforward quail-fighting was also popular – although small, quail are notoriously pugnacious (Ar. *HA* 613b 33–614a 6, Ov. *Am.* II.6.27) – and enthusiasm for this sport extended to Rome; wall-paintings of fighting quail are found in the House of the Vettii in Pompeii, and it is said to have been a pastime of famous generals and emperors (Plut. *Ant.* 33.2, Herod. III.10.3). As a result of these pastimes, quail were common household birds: they figure in poetry as suitable gifts for a young man (Ar. *Birds* 707, GA XII.44) and are depicted in both Greek and Roman art (Tammisto 1997: 101 and n. 681), though the small birds shown in Greek houses on pots and tombstones are notoriously difficult to identify clearly, given the frequent lack of scale.

4. Migrating quail

Pliny Natural History X.64–6, 69

As I am speaking of the migration of birds of passage over sea and land, I should not neglect to speak of small birds as well as these larger kinds. For although the bodily size and strength of swans and geese may seem to make their migration possible, yet the quails always arrive earlier than the cranes, though they are small and when in our country, largely ground-dwelling. Quail fly here in the same way as cranes, not without danger to ships when they are nearing land; for they will often settle on a ship's sails, always at night, and sink the vessel. Their migration is along a fixed route of resting places. When the wind blows from the south they do not fly, undoubtedly because it is a damp and heavy wind; yet they need to be carried by a breeze because of the weight of their bodies and their feeble strength (hence their plaintive cry when in flight, which reflects the effort it costs them); they most commonly fly on a north wind, led by a corncrake. The first quail to reach land is seized by a hawk, which always causes them to turn back and seek an escort – they persuade the wryneck, the eared owl and the water rail to accompany them.

...

Quail are very fond of feeding on the seeds of poisonous plants, for which reason they are not eaten by humans; at the same time there is a custom of spitting when one

sees a flock of quail, as a charm against epilepsy, for they are the only animals other than man to suffer from this disease.

COMMENT: Ancient writers demonstrate an unusual anxiety about migrating quail, apparently convinced that the birds were barely able to fly, and must be encouraged and protected by larger birds. Quail migrations in fact took place (and still do) on a dramatic scale, with millions of birds journeying from Africa to Italy and Greece each spring, and they do indeed have established migration routes: Varro (*De re rust.* III.5.7) mentions the Pontine Islands and Athenaeus (392d) Delos as regular staging-posts for migrating quail. The idea that they required 'leader' birds comes from Aristotle (on whose account Pliny is drawing here: *HA* 597b 14–25), and Arnott (2007: 57, 121, 161) suggests that the appearance of one or more of the named birds on a few occasions with migrating quail may have given rise to the belief. The story about quail settling on ships and sinking them is elaborated by Dionysius (*On Birds* I.30), who claims that because quail fear the sea they fly with their eyes shut and so crash into ships' sails. He also says that they carry stones in their beaks (see CRANE no. 2) which they drop at intervals to tell whether they have reached land.

Ancient sympathy for migrating quail extended only so far: they were exploited as a source of food, and large numbers were trapped, usually by netting, as they arrived at the end of their journey (Pollard 1977: 105). Despite Pliny's comment here, they were widely eaten; the phenomenon of coturnism, quail-poisoning, is well documented, and is linked by the *Geoponica* (XIV.24) with the birds' eating hellebore, but this was more likely to happen later in the season than when the quail first arrived in spring.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 R. Bailleul-LeSuer, *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
 O. Borowski, *Every Living Thing: daily use of animals in Ancient Israel* (Walnut Creek 1998).
 S. Ikram, *Choice Cuts. Meat Production in Ancient Egypt* (Leiden 1995).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 R. Parkinson, *The Painted Tomb-Chapel of Nebamun* (London 2008).
 J. Pollard, *Birds in Greek Life and Myth* (London 1977).
 N.E. Scott, 'An Egyptian bird trap', *The Metropolitan Museum of Art Bulletin* 35.8 (1940), 163–4.
 A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
 E.F. Wente, *Letters from Ancient Egypt* (Atlanta 1990).

PARROT

The conspicuous brightly coloured parrots have populated most of the world's warmer areas and the family *Psittacoidea* (the true parrots) includes macaws, parakeets, lorikeets and budgerigars alongside parrots. Very noisy and highly sociable (in the wild they tend to gather in large flocks of long-term pairs of birds), parrots have been valued as exotic and entertaining pets since antiquity, valued for their beauty and their intelligence as well as their remarkable ability to mimic the human voice (although in the wild parrots do not mimic any other natural noise). The Egyptians do not seem to have been aware of African parrots, and the earliest reports we have of the bird come from the east, especially India (see below).

Aristotle mentions the parrot only once, referring to it as 'the Indian bird' (*HA* 597b 27–9, and they do not appear to have been introduced to Europe before the Hellenistic period. The

Romans, however, were very fond of talking birds such as magpies and crows (see CROW/RAVEN no. 5), and when they discovered the 'Indian bird' they were particularly impressed: Apuleius (*Florida* 12) says that the parrot's speech is far more lifelike than that of the crow. Parrots rapidly became favoured pets (Hor. *Am.* 2.6, Pliny *Letters* IV.2.3), and are common in Roman literature and art. The bird's ability to reproduce human language fascinated Roman scientists, but they were divided as to how far this was a sign of innate intelligence: Plutarch, in *On the Intelligence of Animals* (*Mor.* 973a) credits talking birds with a measure of rationality, while Aelian notes (*NA* XVI.2) that parrots in their native forests do not learn to speak. The process of training parrots to talk was well known, and ancient writers record some fairly brutal training methods; Pliny (*NH* X.117) says that beating with an iron rod is necessary, as the parrot's beak and head are so hard. Many repeat the fact that if made drunk the parrot is prone to become rude (Ar. *HA* 597b 27–9; see Pollard 1977: 137 for an explanation), but Apuleius adds that if a parrot learns to curse, it cannot be trained not to repeat these words, so that the only alternative is either to cut out its tongue or to return it to its native forest.

In classical art two species of parrot are distinguished – the Alexandrine and the Ring-Necked – though depictions are rarely entirely accurate (Arnott 2007: 201). The parrots depicted in mosaics and wall-paintings are usually free-flying, eating fruit and perching among native flora, which might make us wonder whether feral populations ever became established, as has happened in the modern period (see Arnott, above); an epigram of Crinagoras from the first century CE (*AP* IX.562) describes a trained parrot which has bitten through its cage and escaped to the woods. But definite conclusions are difficult to draw from art, and most literary references are to parrots kept within the house.

1. An Achaemenid parrot

Gold pendant in the form of a parrot, Oxus Treasure from Tajikistan, Takht-i Kuwad, c. 400 BCE (London British Museum 124050)



COMMENT: Judging from the distinctive curved shape of the beak and the long wing feathers, the bird represented here is a type of parrot or parakeet. The goldsmith has carefully delineated the feathers on the wings and chest and has placed a circular ring for suspension from a necklace on its back.

Parrots are not native to Iran and do not appear frequently in Achaemenid art. However, there are one or two small-scale representations on seals (Richter 1956: no. 139; Boardman and Vollenweider 1978: no. 118) or, as here, in jewellery form, which suggests that the Persians were familiar enough with them. Stoneware fragments found in the Treasury at Persepolis include the

handle of a tray decorated with parrot heads and four additional handle fragments representing parrots are known (Schmidt 1957: 88).

2. Ctesias' talking parrot

Ctesias F45 = Phot. Bibl. 72 p. 45a 21–50a 4

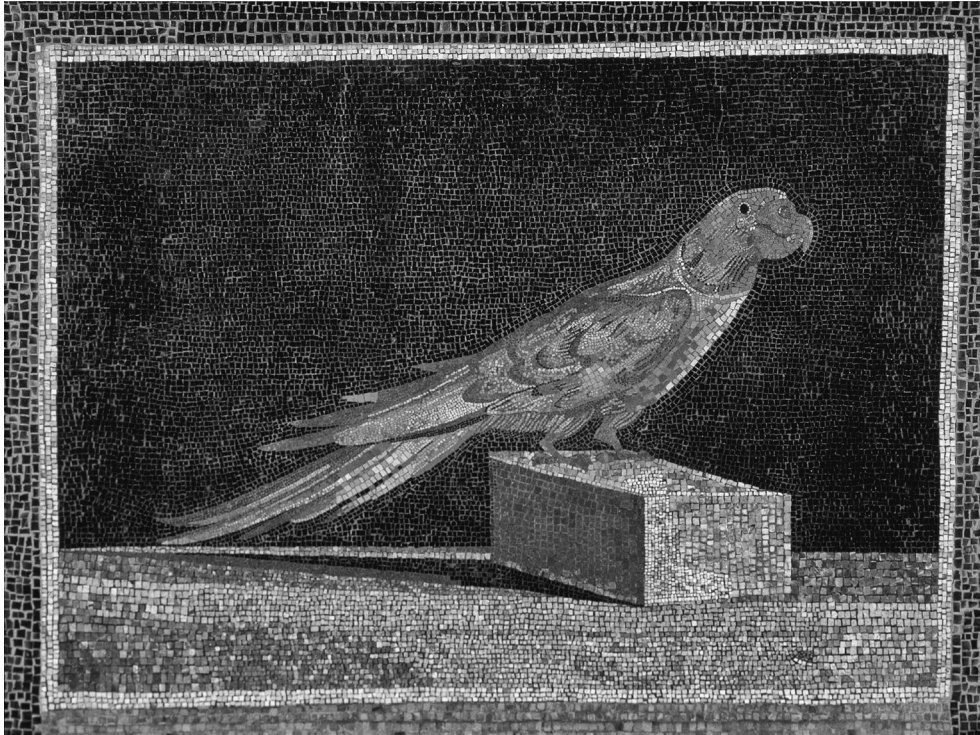
There is a bird called the *bittakos* which has a human voice, is capable of speech, and grows to the size of a falcon. It has a red face and a black beard and is dark blue as far as the neck . . . like cinnabar. It can chat like a human in Indian but if taught Greek, it can speak Greek too.

COMMENT: This section of Ctesias' *Indica* (c. 340s BCE) is the earliest reference to a parrot in classical sources. The name Ctesias gives it, *bittakos*, could be a Persian word, although it is noteworthy that Aristotle (*HA* 597b27) calls it a *psittake* (or the variant *sittake*; see Bigwood 1993b: 541), perhaps deriving from an Indian term (Carter 2006: 45). The Byzantine-period text of Photius (who is epitomising Ctesias) is very corrupt at this point and it has been suggested that the phrase 'like cinnabar' should not be used as a comparison for something dark blue; perhaps something has disappeared from the text and Bigwood (1993a: 324) sensibly argues that the passage should read, 'is blue as far as its neck, but on its shoulder it is red like cinnabar.' It is possible that during his long sojourn in Persia Ctesias saw either the moustached parakeet (*Psittacula alexandri*, sometimes called the Indian red-breasted parakeet) or more likely the plum-headed parakeet (*Psittacula cyanocephala*), common throughout the Indian subcontinent. Its plumage (at least for the male, which appears to be described here – the female is much duller) is mainly bright green, with some blue-green and blue highlights and with a small red patch on each wing-shoulder; it has a narrow black ring around its neck, a black stripe across its lower cheeks, and a black stripe under the chin resembling 'a black beard' (Bigwood 1993a: 324–7).

It is highly likely that Ctesias saw (and spoke to) a living parrot, perhaps one of the exotic birds housed in the royal menagerie (see PEACOCK and CHICKEN) since it is probable that parrots were included among the fauna tribute presented to the Achaemenid Great King by his Indian vassals or other Indian diplomats. Nichols (2011: 97) suggests that the bird's ability to 'speak Indian' thus indicates 'that the bird was brought to the court by an Indian traveller, rather than a Persian or Bactrian merchant who had interacted with the Indians'. This is very likely, as we know that Ctesias obtained other testimony directly from Indians visiting the Persian court. Bigwood thinks it 'unlikely that [Ctesias] heard a parrot speaking Greek', but the parrot's ability to 'speak' the language is no doubt Ctesias' enthusiastic response to the fact that the bird was mimicking him directly. Herodotus (II.55–57) dismisses the possibility that birds can talk, but Ctesias, with his face-to-face experience with a parrot, has no such qualms (see Levine Gera 2007: 89–91).

3. Parrots in art

*Mosaic, Altar Room of Palace V, Pergamum, second century BCE
(Staatliche Museen, Berlin). Photograph: Scala, Florence/bpk,
Bildagentur für Kunst, Kultur und Geschichte, Berlin*



COMMENT: This mosaic panel, from the palace of the Attalid kings at Pergamum, is the earliest representation of the parrot in classical art, and the most accurate, correctly depicting not only the detail of the plumage and beak of the Alexandrine parrot, but also the feet, with two toes front and back. The panel formed part of a much larger mosaic in the Altar Room, depicting theatrical masks, garlands and other still-life scenes (Tammisto 1997: 395–7) and undoubtedly included the parrot as an exotic pet. Parrots are surprisingly frequent in Roman mosaics and wall-paintings: according to Tammisto (1997: 82–4) they appear more often than many native Italian birds. While parrot ownership was a mark of wealth, the main reason seems to be because the practice of copying popular Hellenistic mosaic designs: the famous ‘doves on a basin’ mosaic type, for instance, originally designed by Sosos of Pergamum (Pliny *NH* XXXVI.184) is reproduced across the Mediterranean with many different birds, and the famous mosaic from Capua (Jashemski and Meyer 2001: fig. 330) which depicts two parrots perched on a basin with a dove, is a variation of this (Tammisto 1997: 73–81). Other design types – birds stealing fruit, birds in harness – also adopted the parrot as part of their repertoire (Toynbee 2013: pl. 122; Jashemski and Meyer 2001: fig. 269), and parrots in art spread very widely under the Roman Empire: another famous mosaic panel shows two parrots harnessed to a toy cart (Toynbee 2013: 280–1 and pl. 135), from a third-century CE villa at Cologne, while a Gallo-Roman parrot fashioned

from bone, used as a knife handle, was found at Terre-Franche (GFTF et al. 1962). Whether the birds themselves were equally widespread is less certain: the parrots we see in literature tend to be confined to elite circles in Rome.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 J.M. Bigwood, 'Ctesias' parrot', *CQ* 43 (1993a), 321–7.
 J.M. Bigwood, 'Aristotle and the elephant again', *AJP* 114 (1993b), 537–55.
 J. Boardman and M.-L. Vollenweider, *Catalogue of the Engraved Gems and Finger Rings, Ashmolean Museum*, Vol. I (Oxford 1978).
 P. Carter, *Parrot* (London 2006).
 J. Courtney and P. James (eds), *The Role of the Parrot in Selected Texts from Ovid to Jean Rhys* (Lampeter 2006).
 Groupe de Fouilles Terre Franche, M. Vauthey and P. Vauthey, 'Un manche de canif en os d'époque gallo-romaine', *Revue archéologique du Centre de la France* 1 (1962), 250–4.
 W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001).
 D. Levine Gera, 'Viragos, eunuchs, dogheads and parrots in Ctesias', in G. Herman and I. Shatzman (eds), *Greeks Between East and West. Essays in Greek Literature and History* (Jerusalem 2007).
 L. Llewellyn-Jones and J. Robson, *Ctesias' History of Persia: Tales of the Orient* (London 2010).
 C.E. Newlands, *Statius Silvae Book II* (Cambridge 2011).
 A. Nichols, *Ctesias: On India. Translation and Commentary* (London 2011).
 J. Pollard, *Birds in Greek Life and Myth* (London 1977).
 G.M.A. Richter, *Catalogue of Engraved Gems, Greek, Etruscan and Roman, Metropolitan Museum* (New York 1956).
 E. Schmidt, *Persepolis, II* (Chicago 1957).
 A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.

PEACOCK

The blue peacock (*Pavo cristatus*) is Indian in origin (Jackson 2006: 15–33, 43–8), and although (perhaps surprisingly) largely unknown in ancient Near Eastern societies, its introduction into Europe in classical times is both a great success story, as it extended its range across the Roman empire as far as Britain (Arnott 2007: 237), and a striking journey from exotic pet to luxury foodstuff. The name of the peacock in Greek, *tahōs*, was an unusual form indicating its distant origin, and the first peacocks found their way to mainland Greece in the fifth century BCE, through diplomatic contacts with Persia (Miller 1997: 189). Until the second century BCE they remained a Greek interest, but the Roman conquest of the East led to their introduction into Italy and the West where they rapidly became well known for their exotic plumage and weird cry; by the first century BCE they had found their way to the dinner table as an ostentatiously expensive food (Pliny *NH* X.45). As one would expect, the peacock was very popular with Roman artists, and illustrations on mosaics, paintings and coins are often found (Watson 2001: 388–9); its pagan symbolism, of immortality, was adopted by Christian artists (Toynbee 2013: 252–3). This perhaps came from an ancient legend that the flesh of the peacock did not decay and early Christian catacombs and sarcophagi are therefore frequently decorated with peacocks (Parmelee 1960: 124; on the peacock in later artistic traditions see Bland and Vookles 2014).

1. Peacocks in Mesopotamia?

a) Old Babylonian poem: Enki and the World Order 228–31 (after Veldhuis 2004)

May your bird be a peacock (*Haja*)!
May their cries grace royal palaces!
May all your silver be gold!
May all your copper be tin-bronze!

b) Old Babylonian poem: Nanše and the Birds 49–53 (after Veldhuis 2004)

The peacock (*Haja*) keeps the watch at dawn.
The pure bird calls ‘Haja! Haja!’ at dawn.
A bird red from carnelian, blue from lapis lazuli
white from chalcedony, with all kinds of gold for leather-with-gold inlay
that is how the sculptor fashions a peacock.

COMMENT: The *Haja*-bird mentioned in these two Old Babylonian poetic texts is, with good reason, traditionally translated as ‘peacock’. The name is an onomatopoeia, drawn from the screeching noise the bird makes throughout the day. In *Nanše and the Birds* the colours of the peacock’s feathers are skilfully described and likened to semi-precious stones, as though the bird was being fashioned by an artist. With all its splendour, the peacock is a bird befitting a royal palace. However, as Veldhuis (2004: 252) notes, ‘Whether the peacock was actually known in ancient Mesopotamia remains unclear. It is remarkable that the bird name is known only from [these] Old Babylonian sources.’

2. King Solomon’s peacocks

Hebrew bible, Kings 10.22–3

The King (Solomon) had a fleet of trading ships at sea along with the ships of Hiram (of Tyre). Once every three years it returned, carrying gold, silver and ivory, and apes and peacocks. King Solomon was greater in riches and wisdom than all the other kings of the earth.

COMMENT: Here ‘peacocks’ is a translation of the Hebrew word *tukkiyyim*, which occurs only in this passage and its exact parallel at 1 Chronicles 9.21. There is no conclusive reading of the word (it might even be translated as ‘baboon’), but the closeness of *tukkiyyim* to the Tamil word for peacock, *tokei*, has persuaded most biblical scholars that the peacock is indeed being referred to here (Parmelee 1960: 123–4). However, the text of 1 Kings in all probability dates to the Persian period, with Solomon’s glory modelled on that of an Achaemenid ruler; therefore we need not look to a ‘Solomonic’ date of c. 950 BCE to find peafowl being exported from India via (bizarrely) Phoenicia – an Achaemenid-period date is preferable and fits more logically with what we know of the chronological spread of pavoniculture outside India. Unknown to the Egyptians before the Ptolemaic period, it is *possible* that peacocks were sent to the Neo-Assyrian kings as tribute (Zeuner 1963: 456–7), but this is in no way certain (Jackson 2006: 180, n. 6).

Peacocks may also be attested in Achaemenid Iran (Miller 1997: 189, n. 10). It is possible that peacocks are found in over forty of the Fortification tablets from Persepolis in Iran (e.g. PF 280, 697–8, 1722–3, 2014); the word used for them is *basbas*. That these birds held a place of some importance for the Persians is attested by the fact that the texts relate that they had substantial food rations (males were given higher rations than females), that their keepers also received quality food rations, suggesting they held jobs of status, and that Queen Irtaštuna, the wife of Darius I, had her own flock of these elite fowl. On the other hand, *basbas* might best translate as ‘chicken’, clearly an exotic bird for many Near Eastern peoples; for arguments over the reading, see Tuplin 1996: 108, n. 93 and CHICKEN no. 3.

3. The peacock as a status symbol

Athenaeus Deipnosophistai 379a-e

On the peacock: that this bird was rare is shown by Antiphanes in his *Soldier* or *Tychon*, who says:

Once when a man brought a single pair of peacocks
It was a rare thing; now they are more common than quail.

And similarly Euboulos in his *Phoenix*, for the peacock is a marvel because of its rarity. Aristotle says, ‘The peacock has separated toes and feeds on grass; it breeds at three years of age, in which period it grows its spangled feathers. It broods for about thirty days. It breeds once a year, producing twelve eggs, not all at once, but at intervals of two days. Hens which are breeding for the first time lay eight eggs. Peahens also lay wind-eggs, like chickens, but no more than two in a clutch. They brood and hatch like hens.’ And Eupolis in the *Astrateutos* has this to say about them:

Lest I ever keep
A peacock of this kind in the house of Persephone,
Which wakes all the sleepers.

There is a speech of Antiphon the rhetorician with the title ‘About Peacocks’; in it he does not mention them by name, but calls them ‘spangled birds’, saying that Demos the son of Pyrilampes kept them, and that many people came from Sparta and Thessaly out of desire to see the birds, and were eager to acquire some of their eggs. And he writes about their appearance: ‘If anyone wished to house the birds in the city, they would fly away, but if one were to clip their wings it would remove their attractiveness: for their beauty lies in their feathers rather than their body.’ In the same speech he shows how great people’s desire to see them was, saying, ‘Anyone could go to see them on the first day of the month, but at other times if anyone wished to see them, they could not, and this is not a recent phenomenon, but has been the same for over thirty years.’

COMMENT: Athenaeus’ compendium of sources on dining draws together Greek and Roman comments on the peacock, from Aristotle’s scientific description to a comic poet’s reference to the birds’ raucous shriek. Most striking here is the indication that peafowl were bred and exhibited in classical Athens – Demos was a contemporary of Plato, and the peacocks appear to have originated with his father Pyrilampes, who was once an ambassador to Persia (Miller 1997: 189–90).

The fact that visitors would travel to Athens from the Peloponnese and Northern Greece to see them indicates the high rarity value of the birds at this time. The information is drawn from an intriguing but fragmentary lawcourt speech of Antiphon *On the Peafowl*, discussed by Cartledge (1990) who suggests that it refers to a proposal which had been made to end the aristocratic monopoly of the birds and bring them into the city for general display and appreciation, the impracticality of which Antiphon demonstrates.

4. Pavoniculture in Roman Italy

Varro De Re Rustica III.6

Axius said, 'Now that Fircellius has left, we can address the topic of peacocks freely, since if anyone said anything slighting about them, he might, because of his family, have quarrelled with them'. Whereupon Merula said, 'As far as peacocks are concerned, it's within our own time that flocks of them have begun to be raised and sold for high prices. M. Aufidius Lurcio, for example, is said to make more than sixty thousand sesterces a year. If you are keeping them for profit, you should have rather fewer male birds than female, although if you are keeping them for pleasure you should have more males, for they are much more attractive. Flocks of peafowl should be pastured in the fields. They are also said to be bred on islands across the sea, on Samos in the sanctuary of Juno, and also on M. Piso's island of Planasia. In order to form a flock the birds should be acquired while young and of good appearance; for the peacock is the most beautiful of birds. Females under two years of age are not suitable for breeding, nor are those which are old. They eat all kinds of grain when given it, and are fond of barley; so Seius gives them each every month a *modius* of barley, but feeds them more freely in the breeding season, before they begin to mate. He demands from his fowl-keeper three chicks from each hen, and when they are fully-grown he sells them for fifty denarii each: no other bird brings such a profit. Besides this, he buys eggs and broods them under ordinary hens, and when they hatch out he puts the chicks in the vaulted building where he keeps his peafowl. A house of this kind should be in proportion to the number of peacocks, and should have separate roosting-chambers, smoothly plastered so that snakes and other harmful animals cannot find a way in; as well as this it should have an open space in front, where the birds can go out to feed on warm days. These birds like both their spaces to be clean, so the keeper should go around with a shovel and remove the dung, which should be kept because it is useful both as a fertiliser and as bedding for the chicks.

They say that Q. Hortensius was the first to serve peacock at his inaugural feast, a deed which was praised at the time more by the self-indulgent than by men of good character. Since many quickly followed his example, the price of peafowl has increased, so that a single egg can be sold for five denarii, a bird will easily fetch fifty, and a flock of a hundred birds forty thousand sesterces, so that, as Abuccius used to say, if each hen produces three chicks, it is possible to make sixty thousand sesterces.'

COMMENT: Varro's discussion of farming is delivered by characters with family names drawn from familiar animals: Merula, for instance, means 'blackbird', and the full name of the character who has just left is Fircellius Pavo, 'Peacock'. Writing in the first century BCE, Varro describes the peacock as recently introduced to Roman farming, and emphasises the high returns that can be made by raising the birds. Columella (*De Agricultura* VIII.11) gives a much longer account of

the care and breeding of peacocks, although he states that they are a creature more suited to the aristocratic estate than the small farm. He too suggests that an offshore island is the best place to raise a large flock, as peacocks are not strong fliers and so cannot escape, but can be allowed to run free.

It is plain from the final paragraph that the birds are being raised for consumption rather than show: usually presented at table with its remarkable feathers, the peacock became one of the key luxury foods at Rome (Cic. *Ad Fam.* IX.18.3; Suet. *Vitell.* 13.2). Apicius includes a recipe for it in his cookbook (II.2.6), and Juvenal in his *Satires* paints a picture of the effects of overindulgence, describing the senator who expires of overeating in his bath, with a stomach full of 'undigested peacock' (I.143).

5. The character of the peacock

Aelian On the Nature of Animals V.12

The peacock knows that it is the handsomest of birds, and it knows too where its beauty lies; it is vain and proud of its feathers, since these are what make it beautiful to see and stir up fear in the hearts of strangers. When its plumage has grown in the summer it has its own magnificent raiment; whenever it wishes to strike fear into someone, it spreads its tail and shakes it and emits a shriek which terrifies all bystanders, like those terrified by the clash of the hoplite's weapons. It stretches out its head and nods haughtily, as though shaking a triple crest on a helmet. If it needs to cool itself, it spreads out its wings, turns them forward and shades itself with its own body from the heat of the sun. If there is a wind behind it, it gradually extends its wings, and the breeze blowing through its feathers gently and pleasingly cools the bird down.

The peacock knows when it is admired, and like a handsome young man or a lovely woman it shows off the most beautiful part of its body, arranging its feathers in good order; it is like a flowery meadow or a beautifully-coloured painting, though a painter would have difficulty in representing its particular character. It demonstrates its willingness to show itself off by allowing spectators to take their fill of gazing at it, turning itself around and industriously exhibiting the lovely colours of its plumage, proudly showing that its own garments are more splendid than Median clothing or Persia embroideries. It is said to have been brought to Greece from foreign lands, and for a long time, as it was so rare, it was exhibited to connoisseurs for a fee, and at Athens on the first day of every month both men and women were admitted to see it, which brought an income to the owners. Both the cock and hen were valued at a thousand drachmas, as Antiphon says in his speech 'Against Erasistratos'. For raising peacocks one needs a two-part house, and keepers and guardians for them. The Roman Hortensius is supposed to have been the first to serve peacock at a dinner. But Alexander of Macedon, when he saw peacocks in India, was astonished, and marvelling at their beauty he threatened the harshest penalties for anyone who killed one.

COMMENT: Aelian's miscellany of animals gives one of the most detailed descriptions of peacock behaviour in antiquity, together with Pliny (*NH* X.43–4), who says that the peacock spreads its tail facing the sun to best show its iridescent colouring and correctly observes that in display it curves its tail like a shell. Both writers dwell on the magnificence of the feathers, and also attribute to the bird anthropomorphic qualities of vanity and pleasure in being admired. Pliny goes so far as to claim that when it moults and loses its feathers, it hides itself in shame. Aelian's account, however, contains some striking comparisons: the idea of the bird's rattling tail and nodding

crest as similar to the rattle of a soldier's weapons and his helmet plume, for instance, suggesting something threatening in the display, and the comparison of the tail to Eastern textiles. The latter part of the account is evidently based on Varro (above), but the reference to Alexander the Great's admiration for peacocks at the end of the passage is found only here, and seems implausible; it is unlikely that the Macedonians encountered peacocks for the first time in India when the birds had been known in Greece for a century or more, and when the Macedonians had furthermore passed through Persia, taking control of the Persian king's palaces.

6. Juno's peacock

Sestertius of Faustina II, wife of Marcus Aurelius, 176–80 CE (RIC 1703)



Inscription: DIVA FAUSTINA PIA / CONSECRATIO S C

COMMENT: The displaying peacock on this second-century coin of Faustina is depicted in impressive detail, showing the overlapping feathers of the tail with the 'eye' at the end of each one. Peacocks are frequent images on Roman coins of empresses, because of the set of divine associations they came to embody: they were identified as the sacred bird of Juno, even though they were not native to Italy, and Juno is often accompanied in Roman art by a peacock (Reimbold 1983: 24–36). The origin of the connection is not clear: Varro (above) refers to peacocks kept at the sanctuary of Hera in Samos, and Menedotus of Samos, a third-century BCE writer (Athen. 655a–b), suggests that it was from Samos that peacocks spread across the Mediterranean world. But the sacred peacocks do not begin to appear on Samian coins until the end of the third century BCE, implying that their association with Hera/Juno was of Hellenistic or Roman origin. The link between bird and goddess was later fixed by the myth of Argos, the hundred-eyed watchman whom Juno transformed into the peacock (Ovid *Met.* 1.621–8, 663–722). Empresses of the Flavian and later periods thus adopted the symbol of the peacock to associate themselves with Juno, and the peacock further served to indicate their apotheosis after death, as in this example. On other coins the imagery is more explicit, showing the deified empress carried up to Olympus on the back of a peacock (Reimbold, above). It was from this symbolism, as noted above, that Christian artists adopted the peacock as a reference to everlasting life (Toynbee 2013: 253).

Bibliography

W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
B.F. Bland and L. Vookles, *Strut: the peacock and beauty in art* (Yonkers 2014).

- P. Cartledge, 'Fowl play: a curious lawsuit in classical Athens (Antiphon fr. 57–59)', in P. Cartledge et al. (eds), *Nomos: essays in Athenian law, politics and society* (Cambridge 1990), 41–61.
- C.E. Jackson, *Peacock* (London 2006).
- M.C. Miller, *Athens and Persia in the Fifth Century BC* (Cambridge 1997).
- A. Parmelee, *All the Birds of the Bible* (London 1960).
- E.T. Reimbold, *Der Pfau: Mythologie und Symbolik* (Munich 1983).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- C. Tuplin, *Achaemenid Studies* (Stuttgart 1996).
- N. Veldhuis, *Religion, Literature and Scholarship: the Sumerian composition 'Nanše and the Birds', with a catalogue of Sumerian bird names* (Leiden 2004).
- G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.
- F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

PHEASANT

The pheasant, like the chicken and peacock, was introduced to the classical world from the east, and was admired for its striking appearance: green–purple head, red wattles and long striped tail. It took its name in both Greek and Latin (*phasianos*) from its immediate home on the river Phasis in Colchis, although it originated in the forests of South-east Asia. Pheasants did not, however, become as common in the classical world as peafowl, and knowledge about them remained relatively scant: Aristotle makes only scattered references to them as ground-dwelling birds which often roll in the dust (*HA* 633a 30–b2) and which are particularly susceptible to louse infestation (557a 11–13). Under the Roman empire pheasants were introduced to Italy, Germany and Britain, but references to them in both literature and art remained few, undoubtedly because they did not attract the same anthropomorphisation as the 'vain' peacock (see PEACOCK no. 5).

As with other exotic birds, pheasants found their way to the table in Imperial Rome as a form of conspicuous consumption, and in the later empire eating pheasant functioned as a kind of shorthand for excess, with emperors such as Pertinax and Julian ostentatiously avoiding it (*SHA Pert.* 12.6; *Amm. Marc.* XVI.5.3), while the flamboyant Elagabalus not only had some days when he ate nothing else, but even fed them to his lions (*SHA Elag.* 32.4, 21.2; see LION no. 4).

1. The spread of the pheasant

a) *Aristophanes Clouds* 106–9

Strepsiades: If you care about your father's survival, won't you forget about horses for five minutes and join the philosophers?

Pheidippides: No, by Dionysus, not for all the pheasants which Leogoras breeds.

b) *Agatharchides of Cnidos* (FGrH iii 194) = *Athen.* IX.387C

In the thirty-fourth book of his *History of Europe*, in his discussion of the River Phasis, Agatharchides of Cnidos writes the following: 'huge flocks of the birds called pheasants feed where the river runs out into its estuary.'

c) Pliny Natural History X.132

The most celebrated bird in Parthian Seleucia and in Asia is the coot, a water-bird, and similarly in Colchis the pheasant, which raises and lowers its two ear-like crests, and in the region of Africa called Numidia, the guinea-fowl: all these birds are today found in Italy.

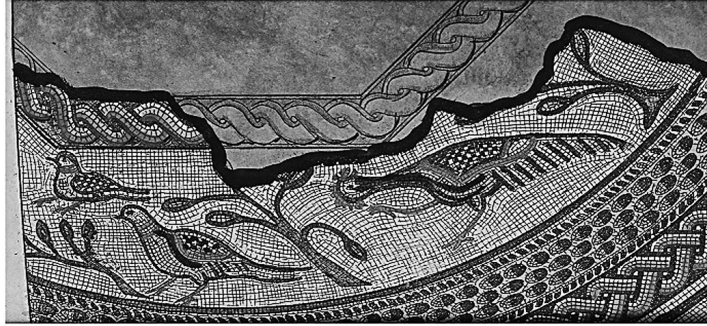
d) Suetonius Caligula 22.3

[Caligula] even established a temple to his own divinity with an order of priests and the most expensive offerings. In the temple stood a golden statue of himself, which was dressed every day in the same clothes which he wore. The richest men vied with each other to hold the priesthood, canvassing and bidding for the opportunity; the sacrifices were flamingoes, peacocks, woodcock, guinea-fowl and pheasants, offered each day according to their type.

COMMENT: The four very short extracts collected here are typical of ancient references to the pheasant in their brevity and lack of detail, but taken together they demonstrate the spread of pheasants across Europe in antiquity. As Agatharchides indicates, the closest natural range of pheasants was around the Black Sea, but the birds themselves appear (like chickens and peacocks) to have reached Greece through Persia and Ionia. The earliest evidence for pheasants in Greece comes in several references in Aristophanes' comedies at the end of the fifth century BCE (*Birds* 68, *Ach.* 725–6), and they appear to have played a very similar role to peafowl as objects of desire for the wealthy: the Leogoras mentioned here, father of the orator Antiphon, seems to have been famous for raising pheasants in just the same way as Demos and his peafowl (see PEACOCK no. 3). Pheasants were among the exotic birds presented in Ptolemy II's Grand Procession at Alexandria in the 270s BCE, but they were slow to spread: in the first century BCE Columella (*De re rust.* VIII.8.10) refers to them only as high-priced exotics, and they do not appear at all in Varro's manual on farming. The extract from Pliny's *Natural History* indicates that by the first century CE they had been introduced as breeding flocks to Italy, and Martial depicts pheasants on the farm of his friend Faustinus at the end of the century (*Ep.* II.58.16), but the inclusion of the pheasant alongside flamingoes and guinea-fowl in Caligula's cult shows that they remained exotic. Not until the later empire did breeding pheasants become more common: the fourth-century agricultural writer Palladius includes a discussion of breeding and raising pheasants (*De re rustica* I.29), and Justinian's *Digest* of Roman law contains a provision that if birds such as pheasants are left in a will, their keepers (known as *phasianarii*) are not considered to be included in the bequest (XXXII.66).

2. The exotic pheasant

*Roman mosaic, Woodchester, fourth century CE
(detail of drawing from Lysons 1797, reproduced courtesy of
Special Collections, University Library, St Andrews)*



COMMENT: The elaborate mosaic discovered in the eighteenth century at the large Roman villa in Woodchester, Gloucestershire depicts Orpheus charming the animals: Orpheus sits at the centre playing his lyre, while all around him are animals, native (stag and boar) and exotic (tigress and elephant) and birds, including a peacock and the only pheasant known in Roman art from Britain. The mosaic is today reburied, and the illustration here comes from the original excavation report published in 1797. It is most likely that all the animals in the mosaic came from a pattern-book rather than being drawn from life by the artists (Toynbee 2013: 292–3), yet in the case of the pheasant we do have evidence for its introduction into Roman Britain: pheasant remains have been identified at eleven sites in Britain, though these tend to be isolated examples rather than evidence of breeding populations (Poole 2010: 159). If they were imported as luxury produce by the Romanised elite, this would account for their appearance on the mosaic alongside other high-status exotic animals.

Pheasants in Roman art are generally rare, and they are slow to appear in Italy (Tammisto 1989, 1997: 247 n.309), but later mosaic representations are scattered across the whole of the empire – at El Djem, Sabratha (Toynbee 2013: pl. 126), Piazza Armerina, Aquileia and Caesarea. They are easy to identify by their distinctive form and colouring, but most are simply decorative; pheasants never attracted any symbolic or religious value.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
G. Clarke, V. Rigby and J.D. Shepherd, 'The Roman villa at Woodchester', *Britannia* 13 (1982), 197–228.
C. Hünemörder, *Phasianos: Studien zur Kulturgeschichte des Fasans* (Diss. Bonn 1970).
G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
S. Lysons, *An Account of Roman Antiquities Discovered at Woodchester in the County of Gloucester* (London 1797).
K. Poole, 'Bird introductions', in T. O'Connor and N. Sykes, *Extinctions and Invasions: a social history of British fauna* (Oxford 2010), 156–65.
A. Tammisto, 'The representations of the Capercaillie (*Tetrao urogallus*) and the Pheasant (*Phasianus colchicus*) in Romano-Campanian wall-paintings and mosaics', *Arctos* 23 (1989), 223–47.
A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).

Insects

BEE

The honey bee has been of enormous economic importance to humankind since Paleolithic times, although the origins of bee-keeping are unknown and much debated. A scene of early human-bee interaction has been discovered in a cave painting in eastern Spain: it shows a human climbing a tree or a rock-face to collect honey while bees furiously buzz around (Zeuner 1963: 494–5). But whether this is evidence for bee-keeping or opportunism is impossible to say.

The Turkish Neolithic settlement of Çatal Huyuk contained rudimentary images of bees dating to c. 6540 BCE; these are painted above the head of a goddess-figure in the form of a sort of halo. Bee veneration continued in Anatolia for millennia, and the Hittites in particular relied on honey as a key element of their religious rituals; the bee is an important character in Hittite mythology (below no. 5). The Hittite economy was helped to prosper through bee-keeping and one of the Hittite laws, c. 1500 BCE, proscribes the stealing of swarms and hives. Administrative texts from Ras Shamra mention honey (*nbt*, Akkadian *nubtu*, *ḥabubitu*), while literary and ritual Ugaritic texts name it as a substance that was offered to the gods. The first steps towards true domestication of the bee were made by the Egyptians, and throughout its long history the bee (*bity*) was honoured as one of the foremost creatures of the gods' creation (below no. 1).

The bee (Greek *melissa*, Latin *apis*) was considered the most interesting and worthwhile of insects by all classical authors. It stands at the head of Pliny's discussion of insects (NH XI.11), as does the elephant for land creatures, the dolphin for sea creatures and the eagle for birds. Several different kinds of bee were distinguished, including the bumble bee and other solitary bees (Beavis 1988: 195–8), but almost all ancient accounts focus on the honey bee (*Apis mellifera*), which was universally admired and praised for its industry, social organisation and technical skill, and often served as a pattern for suitable human behaviour: notoriously in Semonides' poem comparing women and animals the only praiseworthy female is the one modelled on the bee (VII.84–94). Honey bees were considered to be more wholesome than most other insects, as they avoid dead bodies, dung or even live prey, and their activity among spring and summer flowers was an essential part of the pastoral idyll (e.g. Virgil *Aen.* I.423–36, SHEEP no. 15).

Beekeeping is not securely attested in Minoan or Mycenaean sources, but large quantities of honey figure in the Linear B records (Chadwick 1976: 124–6), and it seems likely that the practice of keeping bees in hives was adopted from Egypt in preclassical times, as it is mentioned

in Hesiod's poems immediately following the end of the Dark Ages (*Theog.* 594–9, *WD* 304). Unusually for the ancient world, we have numerous written sources which discuss beekeeping, which was the subject of intensive enquiry: Aristotle's *Historia Animalium* preserves a long investigation of bees and their habits (553a 17–554b 22, 623b 5–627b 21), while Pliny (*NH* XI.19) refers to two individuals, Aristomachus of Soli and Philistus of Thasos, who devoted themselves to the study of apiculture in the Hellenistic period and each wrote a lengthy treatise. There was also a work by the Hellenistic Nicander, *Melissourgika*. Although these are lost, their wisdom was distilled by Roman writers, and we find discussions of beekeeping based on these sources in Virgil (*Georgics* IV.1–314), Varro (*De re rust.* III.16), Columella (below no. 11) and Pliny (*NH* XI. 11–70).

Despite the attention given to bees and their care, certain aspects of their existence remained difficult to understand, such as what exactly they fed on, how they formed wax and how they reproduced. There were persistent beliefs both that bees carried small pieces of gravel to ballast themselves as they flew (Virg. *Georg.* IV.195–7, Plut. *Mor.* 967b), and that they could be generated from the carcass of an ox (Virg. *Georg.* IV.281–314, Varro *De re rust.* III.16.4, *Geoponica* XV.2), though Columella sensibly says that bees are never in such short supply that one would need to try the method (IX.14.6).

1. Bees – the tears of Re

Late Egyptian text, Ptolemaic period, c. 300 BCE, Papyrus Salt 825 (after Leek 1975: 145)

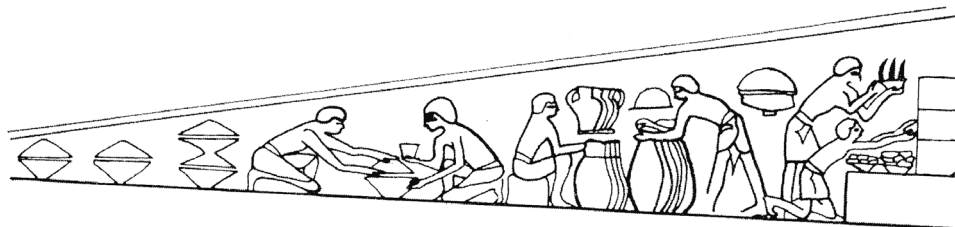
The god Re wept and the tears
from his eyes fell on the ground
and turned into a bee.
The bee made (his honeycomb)
and busied himself
with the flowers of every plant;
and so wax was made
and also honey
out of the tears of Re.

COMMENT: There is little doubt that bees were as central to Egyptian theology as they were to the economy and more widespread culture. Bees were Re's gift to mankind. The religious importance of bees was made manifest through the use made of honey in temple and tomb offerings as well as in magico-medical practices.

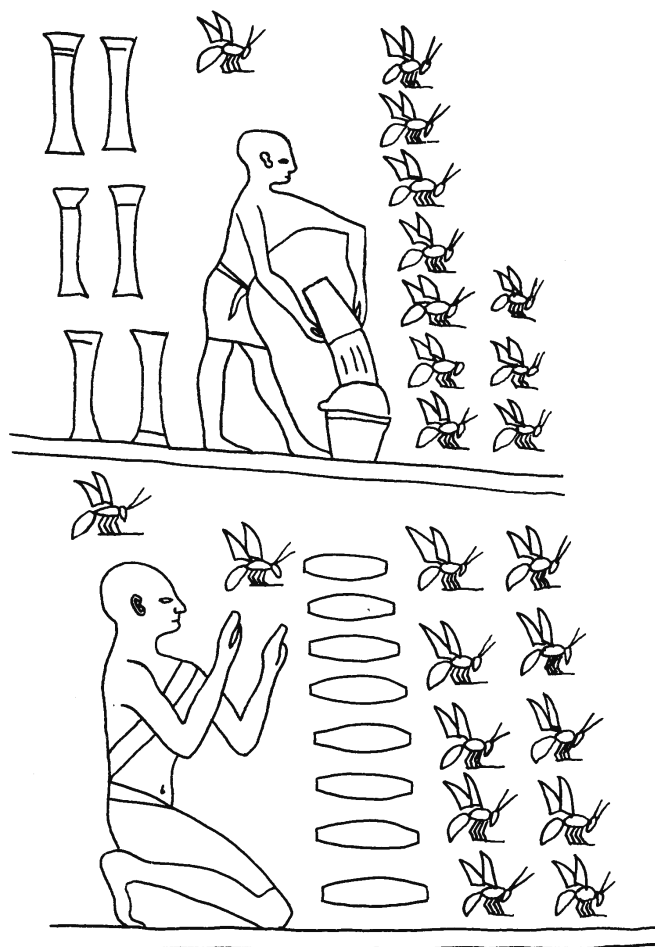
Other gods besides Re were connected to the bee: Neith, the great Delta goddess was said to have had the power to call queen bees with her reed flute, while Nut, the primeval sky goddess could take the form of a bee. Utterance 444 of the Pyramid Texts proclaims, 'Nut, you have appeared as a bee, for you have power over the gods and their *kas*, their inheritance, their food and all their things.' The ithyphallic fertility god Min was honoured with offerings of wild honey and dedicated bee-keepers served his cult: a high official of Ramses IV named User-ma-re-nakhty bore the title 'Purveyor of Honey to Min who is in the Laboratory at Coptos' – probably referring to the place of preparation where liquid honey was created into an ointment to be smeared on the phallus of the statue of the god. In this regard the erotic connotations of liquid honey should not be overlooked either: Hathor and Mut received hymns of praise in which worshippers were encouraged to 'harmonize with the bees after the bull had cried out in the night' (Kritisky 2015: 99).

2. Bee-keeping in Egypt

*a) Tomb of Rekhmire, Thebes, XVIII Dynasty
(after Darby, Ghalioungui and Grivetti 1977: 435)*



b) Tomb of Pabesa, Thebes XXVI Dynasty (after Wilkinson 1992: 114)



COMMENT: The origins of beekeeping remain unknown, although it is clear that the Egyptians were among the earliest peoples to have systematically kept bees, and they may in fact have established the rudiments of apiculture (Brewer, Redford and Redford 1994: 125–9). In the Old Kingdom, a V Dynasty relief in the solar temple of Ni-user-re at Abu Gurob depicts a man kneeling before cylindrical vessels piled on top of each other; he holds one to his lips and is shown breathing into it, possibly blowing smoke into the hive or possibly imitating the distinct call of the queen bee (a technique still used today). Both calling and smoking were techniques employed to extract bees so as to access the honey (on Old Kingdom hives see Kritsky 2015: 8–21).

The Middle Kingdom saw the establishment of state-controlled (or royal) hives and the appointment of individuals, such as a man named Intet, to the position of ‘Nomarch, Royal Acquaintance, and Overseer of Beekeepers’. Other Middle Kingdom officials bore titles such as ‘Overseer of Beekeepers of the Entire Land’ (Kritsky 2015: 22–6). These royal hives continued to flourish into the New Kingdom when more nobles and courtiers began to establish hives on their estates. By the Ptolemaic era Egypt was filled with royal and private bee farms.

Reliefs from the New Kingdom tomb of Rekhmire and the Late Period tomb of Pabasa depict cylindrical hives which are arranged in tiers (discussion in Kritsky 2015: 29–34, 45–53). Both scenes show how beekeepers smoked out or ‘called out’ the bees from the hives, extracted the honeycombs and placed them into large shallow bowls. The reliefs also depict the honey being processed and stored in jars. Different ‘grades’ of honey could be created, including *stf* or light-honey and *dšrt*, dark (or red)-honey. It has been suggested that the different storage jars represented in Rekhmire’s tomb scene shows the collection of different types of honey (Darby, Ghalioungui and Grivetti 1977: 433).

Pabasa’s tomb shows the honey bees represented in orderly lines, although the artist is trying to depict the concept of a swarm (on the representation of the bee in Egyptian hieroglyphic script see Kritsky 2015: 66–75). Interestingly, some Egyptian tomb representations of bees show them without heads, thus rendering them symbolically ‘harmless’ and incapable of stinging in the afterlife (Wilkinson 1992: 114, fig. 2).

3. Honey – the Egyptian economy of luxury

a) Papyrus letter, late New Kingdom (after Vernus 2003: 101)

Kay to the domain of Harakhty gre[ets the governor] of Elephantine. [Montuherkhopshef, in life, prosperity], health, in the favour of Amun-Re, king of the gods. I say to Amun-Re, to Har[akhty] when he rises and sets, to Harakhty and his ennead, that they make you well, that they make you live, that they make you be in the favour of Harakhty, your lord who watches over you.

I opened the jars of honey that you brought for the god. I removed ten *hin* of honey for the divine offering. I noted that they were all filled with bars of unguent. I closed them again. I had them taken south. If it is someone else who gave them to you, make him answer for it, and see if you find a good honey, and have it brought to me. And if there is none, let a *mnt*-jar of incense be brought to me by the priest Netermose.

b) Papyrus letter, Ptolemaic Dynasty, c. 250 BCE (after Ransome 1986: 27)

To Zenon, greetings from the beekeepers of the Arsinoite nome. You wrote about donkeys, that they were to come to Philadelphia and work ten days. But it is now 18 days

that they have been working and the hives have been kept in the fields, and it is time to bring them home and we have no donkeys to carry them back. Now it is no small impost that we pay the king. Unless the donkeys are sent at once, the result will be that the hives will be ruined and the impost lost. Already the peasants are warning us, saying, 'We are going to release the water and burn the brushwood, so unless you remove the hives, you will lose them.' We beg you then, if it pleases you, to send us the donkeys, in order that we may remove the hives. And after removing them we will come back with the donkeys when you need them. May you prosper!

COMMENT: The fact that the bee was the symbol of Lower Egypt and, most importantly, that one of the titles of the pharaoh was 'Bee' (*bity*), clearly demonstrates the high regard placed on both the insect and its produce in ancient Egyptian society. Honey was a high-value luxury item, as a series of texts from the New Kingdom to the Ptolemaic period make clear. It was measured by volume and during the reign of Ramses II, for instance, we learn that one *mnt* jar of honey was worth five *kite* of silver or 50 *deben* of copper. A single *hin* of honey (the standard liquid measurement) was worth 1.2 *deben* of copper. Of course, the value of honey could fluctuate: in the reign of Ramses IX, a hundred years later, honey suffered a decline of almost 37% or 0.76 *deben* of copper per *hin* (Kritsky 2015: 83).

Honey was an extravagance generally denied to the masses; it was the food of royalty and nobility and a mark of privilege. It was an item used in diplomatic gift-exchange and served as a reward in the royal honour-system: an XVIII Dynasty official named Ineni, for instance, boasts that he received gifts of honey from pharaoh's own table (Breasted 1906: 47–8). In the XXI Dynasty honey is mentioned as a ration given daily to the pharaoh's messenger and standard-bearer, although it was not distributed further down the ranks. As a conspicuous display of pious extravagance, the temple accounts of Medinet Habu demonstrate that Ramses III included top-quality honey in all of his offerings to the gods (Brewer, Redford and Redford 1994: 127).

Egyptian texts reveal that honey had a myriad uses; it was not just employed for sweetening food or drink. Honey was needed in the mummification process, for ritual and cult practice, and for medicine – to treat headaches, burns and skin problems, eye diseases, for infected nails and rotten teeth, as a mouth-wash and a suppository (Darby, Ghalioungui and Grivetti 1977: 435–9; Kritsky 2015: 89–94; Marshall 2015). Beeswax was thought to contain magical properties, but was used too for such mundane purposes as boat repairs, paint-mixing and the creation of glue; it was even used to create and style the wigs of human hair worn by royalty and nobility.

4. Importing bees into Mesopotamia

***Akkadian inscription of Shamash-reshe-assur, Middle Assyrian period or early Neo-Assyrian era, c. 1100–700 BCE
(after Zeuner 1963: 498)***

I, Shamash-reshe-assur, governor of Sukhi and Ma'ér, have brought from the mountains of the people of Kabka into the land Sukhi the bees that collect honey and which since the days of my ancestors nobody has seen. I settled them in the gardens of the city of Gabbarini, so as they could collect honey and wax. The manufacture of honey and wax I understand, and the gardeners understand it also. Whosoever wishes to raise his voice, may he ask the elders of the country: Is this the truth that Shamash-reshe-assur, Governor of Sukhi, introduced the honey bees into the land of Sukhi?

COMMENT: The alluvial landscape of Mesopotamia was not a natural habitat for wild bees since it lacked trees, other than date palms, and was even devoid of stone or rock faces which often provide living quarters for bees. Additionally, the intense heat of Mesopotamia was too much to allow bees to flourish successfully (Crane 1999: 163). Honey is known from an early Sumerian text, but it must have been a luxury import and not acquired locally. Beeswax was used for the lost-wax technique in sculpting, but again, the wax must have been imported into Mesopotamia for this purpose. Shamash-resh-assur's ability to import bees from the mountains of Anatolia (in all probability) is a powerful statement of his wealth and social prestige. The governor who had brought bees down to the plain provided hives and placed them in the gardens of the city with a steady supply of shade, water and greenery.

5. Telipinu and the bee sting

a) Hittite myth, version 1 (after Hoffner 1998: 18–19)

The great gods and the lesser gods began [to search for] Telipinu, but [they did] not [find] him. The Sun God sent the swift eagle: '[Go] search for Telipinu.' The eagle went. It searched [the springs(?). It searched] the rivers. But it didn't find him. So it brought back a report to the Sun God: 'I didn't find him.' Hannahanna sent a bee: 'You go search for [my son] Telipinu. When you find [him], sting his hands and feet and make him stand up. Then take wax and wipe him off. Then purify him and make him holy again. Then conduct him back here to me.' The Storm God said to Hannahanna: 'Now the great gods and the lesser gods were searching for him, but didn't find him. So will this bee go find him? Its wings are small. It too is small. And furthermore it is all by itself (?).' [Hannahanna] said to the Storm God: 'Desist. It will go find him.'

b) Hittite myth, version 2 (after Hoffner 1998: 20)

[The goddess ḫannahanna said] ['... You, O bee, should look for Telipinu]. And when you find (him), sting [him on his hands and feet. Make] him stand up. [Take wax] and [wipe off] his eyes and his hands. Purify him and bring him back to me.' The bee searched the high mountains; it searched [the deep valleys; it searched the Blue] Deep. The honey was exhausted in its interior, [the ...] was exhausted [in its ...]. But [it found] him in a meadow in the town of Lihzina, in a forest. It stung [him] on his hands and feet, so that he got up.

c) The bee as the assistant of the goddess Kamrušepa (after Hoffner 1998: 33)

If it is in the mountain, let the bee bring it and put it in its place. If, however, it is in the plain, let the bee (again) bring it and put it in its place. That which is from the ploughed field, let the bees bring and put it in its place. Let the bees go on a journey of three (or) four days and bring my ... here.

COMMENT: The myth of Telipinu, in which the vegetation god is stung by a bee, is Hittite in origin and essentially operates around a standard 'Missing Deity' scenario wherein Telipinu, who consciously separates himself from his familiar world, is brought back into the Hittite sphere through the bee's sting. In the myth's variations two creatures are sent by the gods to find and bring the missing deity home, first an eagle, because of its capacity to soar high and its keen sight.

It fails in its mission, so the bee, the symbol of the abundance which Telipinu's absence has taken from the earth, is sent next and in its journey to find the god it almost starves to death, running perilously low on the honey which fuels its flight.

The goddess ḥannaḥanna, a deity who preceded birth and set the destinies of the new-born, instructs the bee to sting Telipinu not so much as to wake him from his sleep, but to bring him back to his senses and set him on the right path of his divine duty to mankind. The bee's wax and honey, which purify the god, are agents of his reincorporation into the Hittite world. In other words, as Della Cassa puts it (2010: 107), 'Telepinu was forced to be reborn of the forces of nature in order to give new life to the world he had left at the mercy of chaos.' It is interesting to note, too, that bees serve as loyal functionaries for other goddesses, such as Kamrušepa, stressing, it has been suggested, a correlation between bees' honey and the breast milk of the Anatolian mother goddesses.

6. Honeyed words and bible bees

a) Hebrew bible, Proverbs 24:13, 25:16, 27, 27:7

Eat honey, my son, for it is good; honey from the comb is sweet to your taste.

If you find honey, eat just enough—too much of it, and you will vomit. . .

It is not good to eat too much honey, nor is it honourable to search out matters that are too deep. . .

One who is full loathes honey from the comb, but to the hungry even what is bitter tastes sweet. . .

b) Hebrew bible, Song of Songs 4:11, 5:1

Your lips drop sweetness as the honeycomb, my bride; milk and honey are under your tongue. The fragrance of your garments is like the fragrance of Lebanon. . .

I have come into my garden, my sister, my bride; I have gathered my myrrh with my spice. I have eaten my honeycomb and my honey; I have drunk my wine and my milk. Eat, friends, and drink; drink your fill of love.

c) Hebrew bible, Ezekiel 16:13, 19

So you were adorned with gold and silver; your clothes were of fine linen and costly fabric and embroidered cloth. Your food was honey, olive oil and the finest flour. You became very beautiful and rose to be a queen. . .

Also the food I provided for you—the flour, olive oil and honey I gave you to eat—you offered as fragrant incense before them. That is what happened, declares the Sovereign Lord.

d) Hebrew bible, Judges 14:8–20

Sometime later, when [Samson] went back to marry her, he turned aside to look at the lion's carcass, and in it he saw a swarm of bees and some honey. He scooped out the honey with his hands and ate as he went along. When he re-joined his parents, he gave them some, and they too ate it. But he did not tell them that he had taken the honey from the lion's carcass.

Now his father went down to see the woman. And there Samson held a feast, as was customary for young men. When the people saw him, they chose thirty men to be his companions.

‘Let me tell you a riddle,’ Samson said to them. ‘If you can give me the answer within the seven days of the feast, I will give you thirty linen garments and thirty sets of clothes. If you can’t tell me the answer, you must give me thirty linen garments and thirty sets of clothes.’

‘Tell us your riddle,’ they said. ‘Let’s hear it.’

He replied,

‘Out of the eater, something to eat;
out of the strong, something sweet.’

For three days they could not give the answer. On the fourth day, they said to Samson’s wife, ‘Coax your husband into explaining the riddle for us, or we will burn you and your father’s household to death. Did you invite us here to steal our property?’ Then Samson’s wife threw herself on him, sobbing, ‘You hate me! You don’t really love me. You’ve given my people a riddle, but you haven’t told me the answer.’

‘I haven’t even explained it to my father or mother,’ he replied, ‘so why should I explain it to you?’ She cried the whole seven days of the feast. So on the seventh day he finally told her, because she continued to press him. She in turn explained the riddle to her people.

Before sunset on the seventh day the men of the town said to him,

‘What is sweeter than honey?’

What is stronger than a lion?’

Samson said to them,

‘If you had not ploughed with my heifer,
you would not have solved my riddle.’

Then the Spirit of the LORD came powerfully upon him. He went down to Ashkelon, struck down thirty of their men, stripped them of everything and gave their clothes to those who had explained the riddle. Burning with anger, he returned to his father’s home. And Samson’s wife was given to one of his companions who had attended him at the feast.

COMMENT: Honey was the sweetener of choice amongst the ancient Hebrews and was one of the foods considered clean in Jewish dietary laws (although the author of Proverbs suggests that it should be eaten in moderation). The term ‘honey’ appears fifty-five times in the Bible. Sixteen examples are part of the metaphor of Israel as ‘the land of milk and honey.’ Honey could be harvested from the wild from a carcass (as is the case in Samson’s story), from the forest floor or from rock faces (1 Samuel 14: 25; Psalms 81:16). The image of eating wild honey became a symbol for rustic living, and the prophet Isaiah (7:14–15, 20–5) foretold that following the Assyrian devastation of Israel and the destruction of its agriculture, a child soon to be born into the royal court of King Ahaz, Immanuel, would eat curds and wild honey: even royalty will live like wild men. In the New Testament the prophet John the Baptist picks up the theme and survives on a protein-rich diet of locusts and wild honey (Matthew 3:4; Mark 1:6).

But bee-keeping was also practised on an industrial scale, as demonstrated by the 2007 discovery of a huge apiary at Tel Rehov in Israel which contained more than a hundred beehives accommodating over a million bees. The hives dated to the mid-tenth century and early ninth century BCE, and buildings located nearby suggest evidence for the creation of beeswax while the hives themselves were accompanied by fertility figurines, implying cultic protection. The excavators of the Tel Rehov apiary note that,

the organized establishment and efficient operation of the Rehov apiary, as well as its related cultic practices, indicate that there had been a robust central authority that was able to conduct such a specialized industry and to force the populace to tolerate a huge number of bees in the centre of their town. Such an endeavour could not have been the work of a private person and the question remains who exactly this authority was – [perhaps] a local ruler or some more-centralized governing body.

(Mazar and Panitz-Cohen 2007: 218)

Egyptian sources also shed light on the production of honey in ancient Canaan and the wealth of honey, oil and wine located there is noted in the Tale of Sinuhe (Lichtheim 1973: 226). The annals of Thutmose III list the amounts of honey imported from Canaan to Egypt (for example, one shipment with 430 jars and another with 264 jars paid as taxes; see Breasted 1906, 2: nos. 462, 518). Canaanite honey was exported to places such as Tyre and Sidon (Ezekiel 27:17) and sent as diplomatic gifts to foreign rulers (Genesis 43:11; 1 Kings 14:3).

Honey was a food that sensitised the palate, and so became a popular metaphor for pleasure. Yahweh's words were thought of as 'sweeter than honey . . . from the comb' (Psalms 19:10) and in a more prosaic vein the food was used in sexual metaphors too (b, above). Liquid honey was used to symbolise lips when kissing and in an Assyrian incantation a woman desiring sex pronounces that, 'May my lips be liquid honey. . . / may the lip of my vulva be a lip of honey' (Keel 1994: 166). A Sumerian love song speaks of kissing on 'a fragrant honey-bed' (Keel 1994: 167).

7. Wild bees

Homer Iliad II.86–94

Just as the tribes of thronging bees stream out from a hollow rock, pouring out one after another, and fly about among the spring flowers in bands, swarming some here, some there; so the soldiers poured out in their tribes from the ships and tents along the seashore, streaming towards the assembly-place.

Apollonius Rhodius Argonautika II.130–6

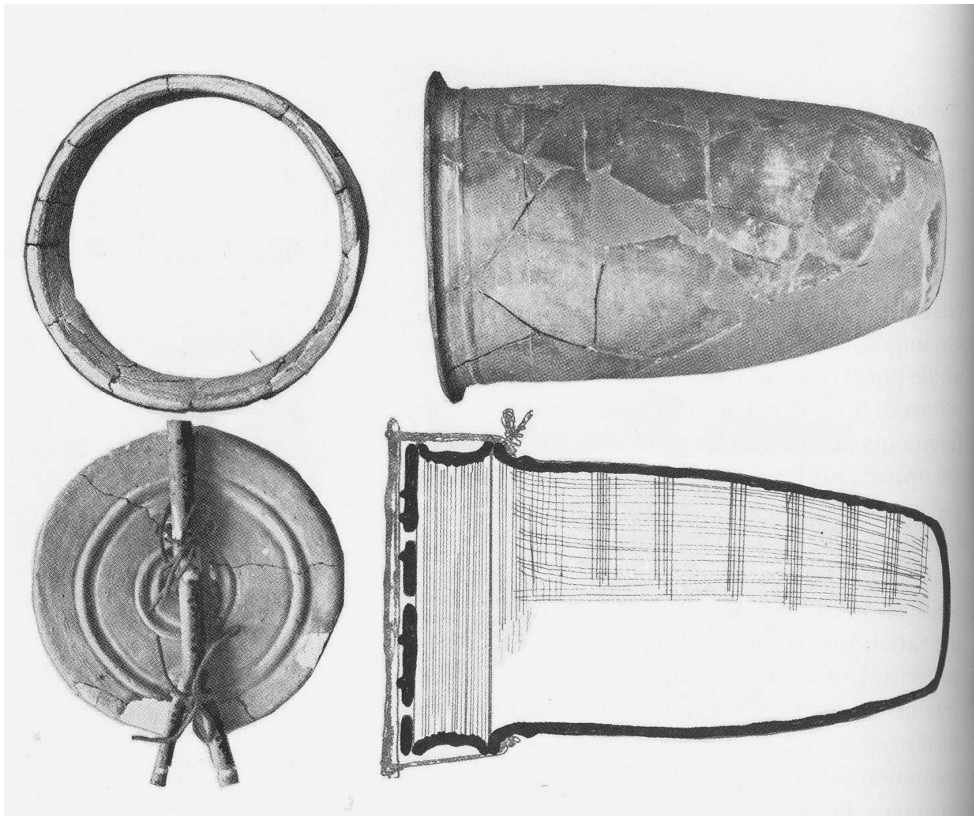
Like a great swarm of bees which shepherds or honey-hunters have smoked out from their nest in a rock; first they buzz around in confusion inside the nest, then when the dark coils of smoke force them out, the dart out together from the rock; so the Bebrykians no longer stood firm, but scattered in all directions, bearing news of Amykos' fall.

COMMENT: The two similes here stretch from Homer in the seventh century CE to Apollonius Rhodius in the third (who was writing in conscious imitation of his great predecessor), both focusing on the image of the wild bees nesting in the rock (Polleichtner 2005). Although the keeping of bees as domestic animals was known from the earliest times in Greece, the gathering of honey and wax from wild bees was an even older practice and continued to exist alongside beekeeping; Pliny includes the bee among those animals which are partly wild and partly tame, together with hares, swallows, dolphins and mice (NH VIII.220). Wild bees nested in rocks, hollow trees and caves (Hom. *Od.* 12.105–6), and there is ample evidence for honey-hunting: the *Greek Anthology* includes an alarming epigram on a honey-hunter who died when his dog gnawed through the rope he had used to descend a cliff to the nest (VII.622). Columella (IX.8.7–10)

details a method of finding wild bees' nests by observing bees at a spring or stream in woodland, marking some with red ochre to see how long it takes them to return, indicating how far away their nest lies, then following them to the nest if it is close, or if at a distance, catching several bees and releasing them one by one along the trail. The similes use the image of the angrily swarming bees to good effect in describing warriors, and the bee appears surprisingly often as a shield device on Greek pots (Chase 1902).

8. Classical beehives

*Ceramic beehive from Trachones, Attica,
third century BCE (after J. Ellis Jones 1976: 84)*



COMMENT: The terracotta beehive shown above was found at a farmstead in the Attic countryside, at Trachones (Ellis Jones 1976). It is a closed cylindrical shape with a pottery lid at one end; the bees came and went via the notch at the bottom of the lid, and the hive could be opened to remove honeycombs. The identification of such vessels as beehives initially proved difficult, but their distinctive feature was found to be ridging on part of the interior surface, to give the bees more purchase for the construction of their combs (Crane 1982: [ch. 4](#)). Hives of the horizontal type were simply placed on the ground, singly or in groups; more recently a second type of upright beehive has been identified at Isthmia (Anderson-Stojanović and Ellis Jones 2002). Hives

were usually placed near the house: the laws of Solon in Athens from 594/3 included among the regulations for land use the stipulation that beehives should not be placed within three hundred feet of a neighbour's (Plut. *Sol.* 23.5–6).

Roman hives were similarly constructed as horizontal cylinders, but not usually of terracotta – Columella says that clay hives are too subject to extremes of temperature (IX.6.2). Between them Columella (IX.6.1–2), Palladius (I.38) and Varro (III.16.15) list nine materials from which beehives could be made, including logs, earthenware and dung, but most were made of bark, wicker or wooden boards. Such hives could be opened at both ends, and the authors envisage large-scale apiaries of multiple hives built into a wall with a covering, though this was practical only on an estate large enough to support numerous swarms (Col. IX.7; Varro III.16.10–16).

The Trachones beehive and similar examples from elsewhere in Greece cast an interesting light on Herodotus' story about the tyrant Cypselus of Corinth, who was said to have been saved from politically motivated murder as a baby when his mother hid him in a *kypsele*, from which he took his name (Hdt.V.92c–d). *Kypsele* is often translated as 'chest', not a particularly convincing hiding-place, but Roux (1963) first proposed that it could be better translated as 'beehive': an empty pottery beehive would be a much more cunning place to hide a baby, especially if placed among other occupied hives – who would venture to remove the lid to look inside?

9. Sacred bees

Silver tetradrachm, Ephesus, 350–40 BCE



Inscription: EPH / THEODOROS

COMMENT: The bee was the distinctive emblem of the city of Ephesus, and appears on its coinage from the very first issues at the end of the sixth century down to the end of the Hellenistic period. The bee was linked to the worship of Artemis, whose temple at Ephesus was one of the wonders of the ancient world: her priests were called *essēnes*, king bees (Pausan. VIII.13.1). The role of the bee in Greek religion and mythology was significant: priestesses of Demeter were called *melissai*, and Sourvinou-Inwood (1979: 239–43) advances the idea that sacred bees were kept at the sanctuary of Delphi and served as an oracle through their buzzing or flight. Bodson (1978: 38–43) suggest that there was continuity in the religious role of the bee from the Mycenaean period to the classical, and the bee does figure prominently in Mycenaean art, most famously in the gold pendant from Mallia in the form of two bees on a honeycomb (Davies and Kathirithamby 1986: fig. 12). But bees could appear in jewellery for reasons of verisimilitude

as well as from religious motives, as on the intricate gold flower wreaths known from ancient Macedonia, where golden bees browse among the flowers (Georgoula 1999). In Roman religion bees were much less significant – their only role was as omens (Pliny *NH* XI. 55; Rasmussen 2003) – and they were similarly much less common in art.

10. The social organisation of bees

Aelian On the Nature of Animals I.10, V.11

Even among bees there are some which are lazy, though not in the same way as drones, for they do not harm the combs nor plot to steal the honey, but feed on flowers, flying and keeping company with the other bees. They do not work to make the combs or to gather honey, but they are not completely worthless, for some of them fetch water for the king bee and the elders, who remain with the king and serve as his bodyguard. And yet others do different work, taking away the corpses of bees which have died, because it is important to bees to keep the comb clean, and they will not allow a dead bee inside. Others stand guard at night, protecting the construction of combs as though it was a tiny city.

(V.11) The king bee attends to the proper organisation of the hive in the following way. He sets some bees to fetch water, others to construct the combs within the hive, and yet others to go out to gather food. And after a time they exchange roles with each other in carefully-defined rotation. The king himself has the duty of organisation and lawgiving for the aforementioned matters, like those great rulers whom philosophers like to say combine the characteristics of a citizen and a king. For the rest he lives at leisure without working. But if the bees wish to change their residence, then the king bee departs: if he is still young, then he leads and the rest of the bees follow; but if he is elderly he mounts on a litter so that the other bees can carry him.

The bees all go to sleep at a given signal; when he thinks it is time to rest the king bee orders one of his subjects to give the signal for sleep, and he obeys, whereupon all the bees which have been buzzing about go to sleep.

As long as the king bee lives, the hive is healthy and all disorder is avoided: the drones happily remain at rest in their own cells, the older bees in their own place, and the younger in theirs. The king dwells separately, and the grubs in their allotted place, while food and refuse are kept apart. But when the king dies, the hive falls into disorder and anarchy: the drones reproduce in the bees' cells, all becomes confused and the swarm cannot flourish, and ultimately the hive perishes without its leader.

COMMENT: What most impressed Greeks and Romans about bees was the hierarchy of organisation which they naturally showed, the hive dividing into kings, drones and workers, each with their allotted role. Other groups of social animals were recognised, including wasps, ants and cranes (Ar. *HA* 488a 8–14), but the structure of bee society was the most easily observed. Queen bees, almost invariably interpreted as male, were seen as kings, complete with palaces, bodyguards and counsellors, and as Aelian shows, fanciful embellishments were created to make their activities mirror those of humans as closely as possible. The political structure of the hive tended to be understood according to the writer's own political milieu: Aristotle, for instance, depicts several leaders coexisting in a single hive, and says that if they become too few the hive will fail, while if there are too many it produces 'factions' (*HA* 553b 14–19). Roman writers, on the other hand, emphasise the need for a single ruler and the dangers of civil war when more than one ruler arises

(e.g. Virg. *Georg.* IV.67–92), and under the Principate Seneca made the king bee, wise and gentle (without a sting) and his subjects' willing obedience a comparison for the ideal emperor (*De clem.* I.19; see Morley 2007). The tendency to project contemporary political ideas on to the beehive explains the disproportionate prominence of bees in texts like the *Georgics* and the *Natural History*.

Drones seem to have been a particular anxiety to those who wrote about bees, because their reproductive role was not understood, and hence they seemed to have no value to the hive. Hesiod is first to discuss them, comparing the drones which eat up the honey but do no work to idle men (*WD* 304), and to women in the household (*Th* 594–9); later writers tend to depict them as alien to the hive and needing to be fought off by worker bees marshalled as an army (Plato *Rep.* 552c–573a; Virg. *Georg.* 175–6), again paralleling the bees' activity to human practices.

11. The beekeeper's year

Columella De re rustica IX.1–18

I will now describe the care of bees throughout the year, as most excellently laid out by Hyginus. From the first equinox, which takes place around the 24th of March in the 8th degree of Aries, until the rising of the Pleiades are the 48 days of spring. Hyginus recommends that at this time one should tend to the bees by opening the hives and cleaning out all the detritus collected over the winter, sweeping away the spiders which destroy the combs and fumigating the hives with the smoke from burning ox-dung; this last is very good for bees, as though by some affinity. The little worms called *tinea* and the wax-moths which develop from them should be killed; they can be made to fall off the combs by fumigation with a mixture of ox marrow and dung. By this treatment throughout the spring the swarms will be strengthened and will go about their work more energetically.

The beekeeper should take particular care, when he is going to attend to the hives, to refrain from sex on the previous day, and never to approach the bees when drunk or without washing, and to avoid strongly-flavoured foods such as pickled fish and other similar sauces, and also pungent onions and garlic.

On the 48th day after the spring equinox, when the Pleiades rise around the 11th of May, the swarms begin to grow in both strength and numbers; in the same period those swarms which have few and weak bees will die off, and also at this time particularly large bees are born from the edges of the comb, which many think are king bees.

From the rising of the Pleiades until the solstice, at the end of June in the 8th degree of Cancer, the bees usually swarm: the beekeeper should be particularly vigilant at this time lest a new brood should fly away. After the solstice until the rising of Sirius, i.e. about 30 days, the honeycombs are harvested alongside the grain. . . . From this time until the autumn equinox the hives should be opened and fumigated every ten days; even though it annoys the swarms, it is believed to be beneficial for them. After they have been fumigated and are still warm, the bees should be cooled by sprinkling the empty parts of the hive with freshly-drawn cold water; if there is any refuse which cannot be washed away, it should be swept out with an eagle's feather, or a stiff feather from any similar kind of bird. Likewise *tinea* should be swept out and wax-moths killed, for these often live among the combs and are harmful to the bees: they gnaw the wax and worms breed in their droppings, which are called hive-worms. When the mallows are in flower, therefore, which is when the wax-moths are at their most numerous, if one puts a bronze vessel in the shape of a milestone among the hives at evening, with a

light placed at the bottom of it, the moths will fly to it from all directions, and as they flutter around the flame they will be burnt up, being unable to fly back up in the narrow vessel, not to retreat from the flame, as they are enclosed by the brazen walls: thus they will be destroyed by the flame as they circle it.

From the rising of Sirius to the (morning) rising of Arcturus is about 50 days, during which the bees make honey from the dewy flowers of thyme, oregano and savory, and this honey is of the best quality until the autumn equinox, before the first of October, when the sun is in the 8th degree of Libra. But between the risings of Sirius and Arcturus the beekeeper should take great care that the bees are not attacked by hornets, which often lie in wait at the entrance to the hive and attack the bees as they come out. After the rising of Arcturus around the time of the equinox in Libra, as I said, the second harvest of the honeycombs is made. Then from the equinox, around the 24th of September, until the setting of the Pleiades, a period of 40 days, the bees gather honey from the flowers of tamarisk and woodland shrubs, and refill their winter store. None of this honey should be taken, in case the bees become demoralised by constant losses and fly away in despair, so to speak.

From the setting of the Pleiades to the winter solstice, which occurs around the 24th of December in the 8th degree of Capricorn, the bees use up the honey which they have stored, and live on it until the (evening) rising of Arcturus. . . . Therefore, while some days of autumn still remain, on a very sunny day after the hives have been cleaned out, the covers should be moved inside the hives right up to the combs to close off all the empty regions, as a narrower space will warm up more quickly in the winter cold. The same should also always be done in hives which have small numbers of bees and are sparsely inhabited. Then any holes or gaps should be plastered up from the outside with a mixture of mud and ox-dung, leaving just one entry for the bees to come and go. And even though the hives are covered by a porch, nevertheless they should be heaped with straw and leaves, as much as possible, to protect them from cold and from stormy weather. . . . It is better, however, when the bees are suffering from hunger in the winter, to give them either dried figs which have been crushed and soaked in water, or concentrated must or raisin wine, placed in small vessels at the entrance to the hive. It is also useful to soak pieces of clean wool in these liquids, so that the bees may settle on the wool and suck out the juice as though through a drinking-straw. And it is good to give them raisins which have been crushed and sprinkled with a little water. These foods should be given to the bees to sustain them not only in winter, but also in the seasons when the spurge and elm are in flower, as I noted above. For about 40 days after midwinter the bees use up whatever honey they have stored, unless they have been left an unusually large amount, and often, once they have emptied the wax, they sleep in the comb without eating, hibernating as snakes do, until the time of the (evening) rising of Arcturus on the 13th of February; they preserve themselves by sleeping, but if their fast becomes extended, to save them from dying it is best to put sweet liquids through the entrance of the hive using a straw. Thus the bees will be sustained through the time of scarcity until the rising of Arcturus and the first swallows bring the promise of better weather. Then, once spring has come and the warm weather, the bees venture out to their pastures; after the spring equinox they buzz about everywhere unceasingly, harvesting flowers suitable for raising their young and carrying them to the hive.

COMMENT: Columella devotes a significant amount of space in his treatise on estate management to beekeeping, describing the construction of an apiary, treatments for ailing bees, the

collection of wild swarms and the harvesting of honey and wax (IX.2–16). Beekeeping is extensively documented by agricultural and scientific writers, sometimes with a political subtext (as in Virgil), but Columella deliberately sets his face against the mythological and zoological aspects covered in other works (2.5), and limits his account to practical matters; he adopts this whole section from the lost work of Hyginus on agriculture, supplementing it with material from Celsus. What strikes the reader most strongly is the great attention paid to the bees, particularly in feeding them in winter and protecting them from pests. The bees are anthropomorphised and care is taken about their feelings, e.g. the suggestion that they may be demoralised by over-harvesting of honey: the beekeeper is to be responsive, observing and listening so that he knows when they are about to swarm or fight among themselves (9.1–5). The concern for the welfare of the bees extends to the identification of diseases such as shrivelling illness or ‘flux of the belly’, and the offering of medications (13). Varro (III.16.10–11) presents the apiary as potentially very profitable, and certainly both honey and wax were important in the Roman economy, but comparative evidence suggests that most beekeeping was on a small personal scale, and the agricultural writers’ interest in bees was as much literary as practical.

Bibliography

- V.R. Anderson-Stojanović and J. Ellis Jones, ‘Ancient beehives from Isthmia’, *Hesperia* 71 (2002), 345–76.
 I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
 L. Bodson, *Hiera Zoia: contribution à l’étude de la place de l’animal dans la religion grecque ancienne* (Brussels 1978).
 J.H. Breasted, *Ancient Records of Egypt* (Chicago 1906).
 D.J. Brewer, D.B. Redford and S. Redford, *Domestic Plants and Animals. The Egyptian Evidence* (Warminster 1994).
 J. Chadwick, *The Mycenaean World* (Cambridge 1976).
 G.H. Chase, ‘Shield devices of the Greeks’, *HSCP* 13 (1902), 61–127.
 E. Crane, *The Archaeology of Beekeeping* (London 1982).
 E. Crane, *The World History of Beekeeping and Honey Hunting* (London 1999).
 W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London 1977).
 M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
 R. Della Cassa, ‘A theoretical perspective on the Telipinu myth: archetypes and initiation rites in historical contexts’, *Antiguo Oriente: Cuadernos del Centro de Estudios de Historia del Antiguo Oriente* 8 (2010), 97–116.
 J. Ellis Jones, ‘Hives and honey of Hymettus: beekeeping in ancient Greece’, *Archaeology* 29.2 (1976), 80–91.
 E. Georgioulas, *Greek Jewellery from the Benaki Museum Collections* (Athens 1999).
 H.A. Hoffner, *Hittite Myths* (Atlanta 1998).
 O. Keel, *Song of Songs* (Minneapolis 1994).
 F.F. Leek, ‘Some evidence of bees and honey in ancient Egypt’, *Bee World* 56.4 (1975), 141–8, 163.
 M. Lichtheim, *Ancient Egyptian Literature. Volume 1: The Old and Middle Kingdoms* (Berkeley and Los Angeles 1973).
 G. Kritsky, *The Tears of Re. Beekeeping in Ancient Egypt* (Oxford 2015).
 K. Marshall, ‘About the efficacy of eating fly specks!’ *Ancient Egypt* 16.3 (2015), 15–17.
 A. Mazar and N. Panitz-Cohen, ‘In the land of honey: bee-keeping at Tel Rehov’, *Near Eastern Archaeology* 70.4 (2007), 202–19.
 N. Morley, ‘Civil war and succession crisis in Roman beekeeping’, *Historia* 56 (2007) 462–70.
 W. Polleichtner, ‘The bee simile: how Vergil emulated Apollonius in his use of Homeric poetry’, *Göttinger Forum für Altertumswissenschaft* 8 (2005), 115–60.
 H. Ransome, *The Sacred Bee in Ancient Times and Folklore* (Bridgewater 1986).
 S.W. Rasmussen, *Public Portents in Republican Rome* (Rome 2003).
 G. Roux, ‘κυψέλη: οὐκ αὐτὸν κρύβει τὸν μικρὸν Κύψελος?’ *REA* 65 (1963), 279–89.
 C. Sourvinou-Inwood, ‘The myth of the first temples at Delphi’, *CQ* 29 (1979), 231–51.
 P. Vernus, *Affairs and Scandals in Ancient Egypt* (Ithaca 2003).
 R.H. Wilkinson, *Reading Egyptian Art* (London 1992).
 F.E. Zeuner, *A History of Domesticated Animals* (London 1963).

3

WILD ANIMALS

Mammals

DEER/ANTELOPE

Deer and antelope comprise many species, and are widely distributed across our region. Deer have been important to human civilisation since prehistoric times when they were first hunted for their meat and skins, and even ancient societies that observed strict food taboos were content to regard the deer as a clean animal fit for consumption (Deuteronomy 12.22). Deer were among the first animals to be depicted in human art, usually in the context of the hunt and of magico-apotropaic ritual; early shamanic religions seem to have held the deer in high esteem and deer skins and antlers formed the religious regalia of early societies. The deer has always been admired for its swiftness, but targeted because of its timidity and passivity, as ancient literature and iconography frequently stresses.

The deer of antiquity ('Old World deer') were all members of the *Cervidae* family, composed of between seventeen and forty-one species (Fletcher 2014). In antiquity three types of forest- and grassland-dwelling deer were encountered: the red deer (*Cervus elaphus*), the roe deer (*Capreolus capreolus*) and two species of the fallow deer (*Dama dama* and *Dama dama mesopotamica*), although they are rarely distinguished in ancient sources with any kind of clarity (below no. 1). The red deer, the physically most imposing of the species, had a wide sphere of habitation, living in suitably wooded areas of the Middle East and Asia, North Africa and parts of Europe, although by the Hellenistic age the red deer had all but disappeared from the Levant and its appearance in Egypt is a matter of scholarly speculation. Likewise, the fallow deer has all but vanished from the Middle East and only the Persian fallow deer (*Cervus dama dama*) remains in the Zagros Mountains of Iran. The roe deer was possibly the most common of Old World deer, but as it is solitary and lives under cover, emerging on to grasslands only to graze, it makes very few appearances in ancient Near Eastern art and literature.

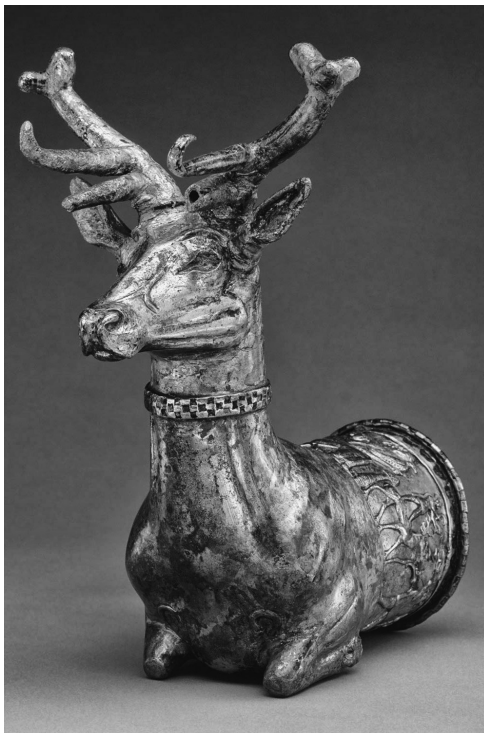
In the northern Mediterranean the red and roe deer were native and the fallow deer was introduced from Anatolia in the Neolithic period (Yannouli and Trantalidou 1999). As the largest native species, red deer tend to receive the most attention, even though the smaller roe deer were more common (King 2001: 417), and this is revealing of Greek and Roman attitudes: these cultures tended to admire large and fierce animals, and the timid deer was the antithesis of the savage carnivore. The insult that begins the quarrel which provides the narrative of Homer's *Iliad* is representative: Achilles tells Agamemnon that he has 'the eyes of a dog and the heart of a deer'

(I.225). To find a wholehearted appreciation of the deer, one has to look to the cultures of the North, with their stag gods and widespread use of deer in ritual and art (Aruz 2000). Only as the Roman empire expanded to encompass these areas did positive attitudes towards the deer begin to appear.

Both Aristotle and Pliny note that deer are easy to study because they were often kept in captivity: Aristotle says that rumination can be observed in tame deer (*HA* 632b 2–4), while Pliny, describing the cycle of antler growth and shedding, comments that stags can be observed in *vivaria* or parks (*NHVIII*.115). Varro (*De re rust.* III.12.1) and Columella (*De Agri.* IX.1.1) both describe the keeping of deer (and other imported antelopes) by wealthy landowners in enclosures on the villa estate, a form of conspicuous consumption analogous to the deer parks of medieval and modern aristocrats. It was possible to hunt in such *vivaria*, but their principal role was show; deer hunting was more often carried out in the wild. The hunting of deer across the Mediterranean was mainly for practical purposes – for venison, hides and antlers, and as a means of suppressing agricultural pests (see no. 5 below). *Dammae* are mentioned in Roman arena shows from time to time, but in most cases these seem to have been non-native antelopes, displayed for novelty value, rather than native deer.

1. The deer among the Hittites

a) Silver drinking vessel with gold inlay design (with line drawing detail), Hittite, fourteenth to thirteenth century BCE, from Anatolia (New York, Metropolitan Museum of Art 1989.281.10). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



b) Hittite wisdom literature (after Collins 2003: 73)

A mountain expelled a deer from its body. The deer went over to another mountain. It grew fat, became discontented and began to curse the new mountain: 'If only fire would burn up the mountain on which I am grazing! If only Tesub would strike it (with his lightning), and fire burn up the mountain!' Now when the mountain heard (this), his heart became sick within him, and he cursed the deer in return: '[Why] does the deer which I have fattened now curse me in return? Let the hunters bring down the deer! Let the fowlers capture him! Let hunters take its meat, and let fowlers take its hide!'

There is a deer. It grazes those pastures which are on the (near) side of a river. And it constantly sets its eyes also on those pastures on the far side. It did not care for the pastures on the (near) side (which it already had), and it did not achieve the one (on the far side).

COMMENT: The deer was a very important animal in the culture of the Hittites and frequently enters into their religious art and literature; this has led many scholars to believe in the presence of some form of Hittite deer cult, of the kind certainly found in other Indo-European societies. Indeed, the deer can be thought of as *the* wild animal *par excellence* for many Indo-European peoples (Collins 2003: 74). The red, roe and fallow deer were native to Anatolia, although it is often difficult to distinguish between the species in Hittite iconography and literature. Hittite terms for deer are, it appears, interchangeable, although the word *kūnala* ('horned-one'), it has been suggested, refers particularly to the red deer, and specifically the male horned hart (Collins 2003: 78).

A frieze depicting a religious ceremony decorates the rim of a rhyton in the form of a recumbent hart, suggesting the uses for which the cup was intended. A prominent figure, thought to be a goddess, sits on a cross-legged stool, holding a falcon in her left hand and a small cup in her right. She wears a conical crown and an incense burner separates her from a male god who stands on the back of a stag. He, too, holds a falcon in his left hand, while with his right he grasps a small curved staff. Three men are shown in profile, moving to the left and facing the deities. Each holds an offering to the divinities. Behind the men is a tree or plant against which rests the collapsed figure of a stag (see FALCON no. 3).

Cult scenes and religious processions are often represented in Hittite art, and texts make frequent reference to animals, trees and plants associated with rituals or festivals. Though the precise meaning of the frieze on this vessel remains a matter of conjecture, it is possible that it was intended to be the personal property of the stag god. Archaeological evidence for the presence of red deer bones in the vicinity of the Hittite capital at Hattuša suggests that they were kept in game parks which perhaps were attached to the major temples (Collins 2003).

2. Leaping stags and hinds

Line drawings of a Middle Assyrian cylinder seal (above), thirteenth century BCE and an ivory engraving from Kamid el-Loz, Lebanon (below), thirteenth century BCE (after Keel 1994: 97)



COMMENT: The swiftness and agility of deer and antelope were proverbial throughout the ancient Near East (the images of leaping stags, does, antelope and gazelles are frequently employed in the Hebrew bible: Psalms 18.33, 2 Samuel 2.18, 1 Chronicles 12.8). The image of an athletic stag is employed as a metaphor for manly beauty and bravado by the poet of the Song of Songs (2.9, 17, 8.14):

My beloved is like a gazelle or a young stag.
Look! There he stands behind our wall,
gazing through the windows, peering through the lattice . . .
Until the day breaks and the shadows flee, turn, my beloved,
and be like a gazelle or like a young stag on the rugged hills . . .
Come away, my beloved, and be like a gazelle
or like a young stag on the spice-laden mountains.

Commenting on the figures of the leaping bucks found in the Neo-Assyrian and Lebanese images seen above, Keel (1994: 96) notes their relationship to the stag-imagery found in the Hebrew love poem:

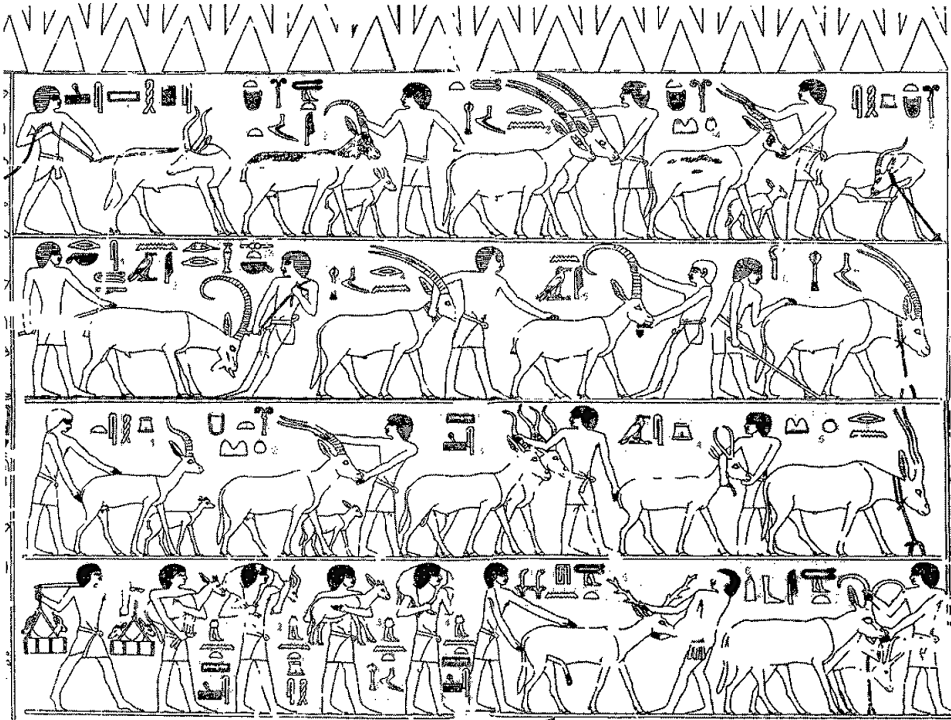
Leaping and jumping express agile grace and a heightened feeling of life more than they do unbridled passion. The leaping fallow buck on [the] Assyrian cylinder seal seems to characterize the same kind of happy and excited feeling of life. The young buck on an

ivory toy-chest from Kamid el-Loz . . . is turning its head to look for a following fox or jackal (not depicted here), but its wide-paced gallop gives the predator no opportunity for attack.

(For deer hunting see HUNTING/ENTERTAINMENT.)

3. Cervidae of the desert

*Line drawing after a wall relief from the
mastaba of Ti at Saqqara, V Dynasty*



COMMENT: This remarkable scene, composed of four registers, contains a detailed parade of the animals of the desert who are presented to the tomb owner Ti and his wife. The artist shows remarkable skill in his presentation of the animal parade: every animal is carefully differentiated, with the horns of each species especially well observed. Each animal is identified by a hieroglyphic tag (for a fuller treatment of each species see Houlihan 1996: 45–8, 57–9).

The animals of the top register are identified from the right as, first, ‘female gazelle’, which is tethered and licks its hind leg; she is followed by a ‘female addax’ held by its chin and horns by a herdsman while her infant fawn stands between her front legs. Next in line, another herdsman leads the two ‘young oryx’; he is followed by a third man who clutches the horns of a ‘female ibex’ accompanied by its young. Finally, a herdsman bringing up the rear controls a bubalis antelope (or hartebeest) with some difficulty, the text above him reading: ‘Lassoing a bubalis antelope’; the animal appears to be uncooperative and turns its head inwards towards the handler.

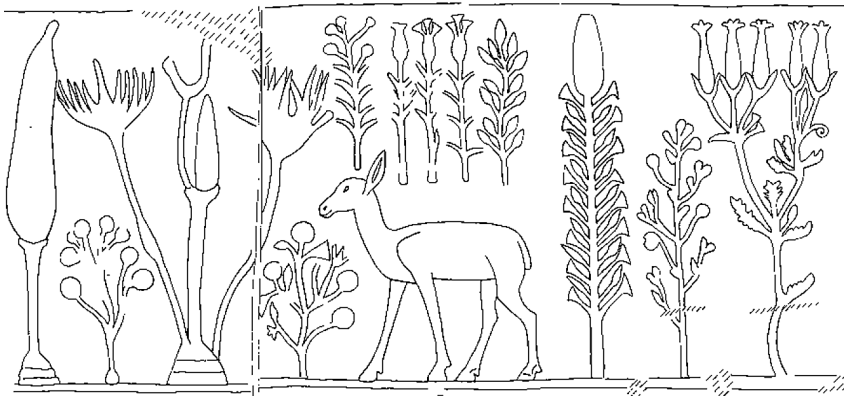
At the right-hand side of the second register an 'oryx' is tethered to the ground while an 'overseer' (identified by a single hieroglyph depicting a crook) gently places his hand on the animal's flank. Next in line is an 'ibex' which is being handled with more difficulty – another man slaps its rump while holding on tightly to the horns of a 'young oryx'. The final animal is an 'ibex', which once again refuses to move. Two men attempt to control it; their conversation is recorded in the hieroglyphs in front of them: 'Pull it towards you!' shouts one man. 'I'm doing you a favour!' snaps his colleague in reply.

The far right of register three is led by a tethered 'addax', behind which a man wraps his right arm around the horns of an 'Isabelle gazelle', whilst holding the animal's muzzle too. Two 'bubalis antelope' follow, and next come the final two animals accompanied by their young: the first is a 'female addax' (note the hieroglyph of the uterus in its naming text), and then finally a 'female gazelle'. In the lowest register the artist has included the word 'bringing' before the identifying name of each animal. The register begins again with both a tethered and an untethered 'barbary sheep'. Behind these, two men are clearly having difficulties in controlling a male 'fallow deer', since, given the focus on its genitals, the stag is clearly in heat. One man grabs the stag by its horns while his companion controls the animal's hind-quarters. This is one of only twenty-five representations of deer to be found in Egyptian art (Houlihan 1987). Next come five men carrying young animals: the first and the fourth are designated as an 'Isabelle gazelle', the second is an 'oryx' and the third a 'gazelle'. The fifth and final man carries two baskets suspended from a beam on his shoulders; in each of which are two unidentified baby animals, but judging by the horns, these last two are infant gazelles.

Semi-domesticated ruminants appear in several Old Kingdom tomb scenes, tethered in very small stalls and eating from mangers, while a similar Ramesside scene is accompanied by a text: 'Give fodder to the oryxes and to the gazelles' (Janssen and Janssen 1989: 53). These animals might have been captured, held in captivity and then fattened for the table. In fact, evidence suggests that gazelles and oryxes were sometimes force-fed to improve the quality of their meat.

4. Exotica in Egypt: Persian fallow deer

Wall relief from the Botanical Garden of Thutmose III at Karnak, XVIII Dynasty



COMMENT: Scholars are divided as to the extent of the deer's presence in Egypt and whether they were indigenous to the country (Houlihan 1987: 242). The Egyptian word for deer (*hmn*)

is found only rarely, and disappears in the New Kingdom altogether to be replaced by a Semitic word written only in demotic. Deer played an insignificant part in temple services and mythology and only enter into religious texts in the Roman period. One such funerary text for a young girl (Paris, Louvre N 2420c) tentatively links the deer to Hathor:

Receive them among you! O you Westerners, you dead of the hall of both truths! For she is a little (girl). One will give her a position in the West. One will offer her water on the table of oblations after Isis and Osiris. May she find Hathor-in-the-midst-of-the-West as she (the deceased) rests on a bed, as the antelopes, the gazelles, [the] deer and the animals of the desert are by her on the sand, as they say: 'Is our mother here? Is this our mother. . . ?'

The Persian fallow deer was widely encountered throughout Iran, Mesopotamia and the Levant, but evidence for this animal's presence in Egypt is very limited. Its appearance on the wall relief from the temple of Amun at Karnak might be explained by the notion that it was an exotic import from the east and that such deer were brought into Egypt exclusively as game for the hunt (see further Fletcher 2011). The presence of a stag among the animals found in Ukhotep's desert hunting scene (see SPORT) alongside an exotic giraffe imported from Africa certainly suggests as much. The 'botanical garden' scene of Thutmose III depicts numerous forms of exotic flora and fauna and while it is difficult to identify with absolute certainty all of the species of plants, birds and animals, there is general agreement that the pharaoh's artist has accurately depicted a Persian fallow deer (Beaux 1990).

5. Between wild and tame

Attic black-figure cup, Berlin, Schloss Charlottenberg F1806, c. 540 BCE, attr. Nikosthenes (Drawing after Walters 1905; some reconstruction of scene)

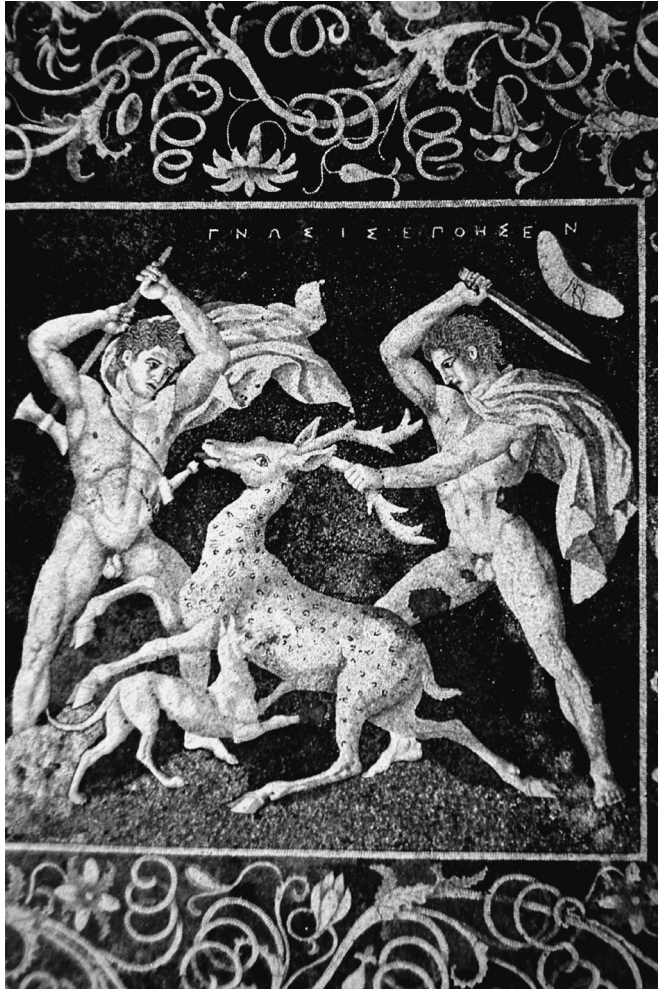


COMMENT: This black-figure cup carries one of the rare scenes from Greek art of agricultural work: three men plough with oxen while a fourth sows seed from a basket. Around and among the farmers and their domestic animals are other animals characteristic of the marginal land between cultivated and wild – four deer, two lizards, a cicada and another animal sometimes restored as a tortoise and sometimes as a snail. The deer are female, without antlers, and are small and delicate in build, suggesting that they are roe deer. The scene provides an interesting perspective on the role of deer in Greek society, reminding us that the magnificent stag (Hom. *Od.* X.156–71) was

something of an exception: most deer were small creatures living close to human settlements which could easily become habituated to human presence: Aristotle notes that deer will give birth at the side of the road, gaining protection from wild predators which will not approach areas frequented by humans (*HA* 611a 16–17). Indeed, the wild species depicted here (if we understand the insect as a locust rather than a cicada, and reconstruct a snail) can be interpreted as crop-destroying animals, an indication of the wild encroaching on the cultivated (Nollé 2005). At the centre of the image a young hunter crouches with a *lagōbolon* or hare-hunting stick, ready to drive the would-be crop-eaters away. The Greek attitude towards the deer as a liminal animal between wild and tame can also be seen in Xenophon's *On Hunting*, which envisages deer as low-status game for trapping – see further below.

6. The stag hunt

Mosaic, Pella, signed by Gnosis, fourth century BCE
(Photograph Ann Ronan/Heritage Images/Scala, Florence)



COMMENT: Much of what is written about deer, ancient and modern, relates to hunting. The mosaic here, created in the fourth century by a Greek artist for a wealthy Macedonian, celebrates the moment of the kill, with two hunters delivering the *coup de grâce* to a stag cornered by the hounds, an image which seems recognisable to us as the celebration of a trophy kill. But as suggested above, this attitude towards deer is more characteristic of northern Europe than the Mediterranean countries: in Macedonian culture the lion was the most prestigious prey – Macedonian kings depict themselves as lion hunters – while killing a wild boar was a rite of passage for elite men (see LION no. 8; SPORT no. 12). The deer, fleet and timid, offered insufficient challenge for a display of masculinity, as is very clearly shown in Xenophon's treatise *On Hunting*, near contemporary with the mosaic. Xenophon describes the hunting of deer not by chasing but by trapping – catching an unprotected fawn and using it to lure the doe into an ambush (9.1–8) or setting foot-traps (11–19). The deer hunt here, as Cohen (2010) notes, is a posed and theatrical scene aiming to heroise the two hunters rather than record a realistic event. Their weapons and postures are at best impractical, and it is noteworthy that Xenophon advises against approaching a cornered stag or doe, recommending it be killed from a distance with a javelin (9.20).

Hunt scenes which are closer to life do not appear until later Roman art, such as the hunt mosaics at Piazza Armerina in Sicily and many in Roman North Africa (Dunbabin 1978: 55–6, figs 8, 198): these show deer being driven by dogs into nets that have been secured to funnel them into a capture zone, probably to take alive. We find some expressive statues of deer set upon by hounds, but it is only in places like Roman Britain that we begin to see a celebration of the stag as 'noble prey', e.g. on the mosaic pavement at Hinton St Mary in Dorset (Toynbee 2013: fig. 72).

7. Sanctuaries for deer

Aelian On the Nature of Animals XI.7

In Curias [on Crete], where there are very many deer, and many hunters who pursue them, the deer when chased take refuge in the temple of Apollo there, which has a very large sacred grove, and the dogs bark at them, but do not dare to approach them. The deer graze peacefully and without fear in a herd together, trusting by some mysterious instinct to the god for their safety.

COMMENT: Greek sanctuaries included not only sacred buildings, but extensive land in the form of pasture or woods, and many deities such as Apollo, Artemis and Pan offered protection to the wild animals which lived in the temple precinct (Mastrocinque 2009). Pausanias (X.35.7) comments that in such sanctuaries wild animals would grow to be larger and healthier than their unprotected cousins. The status of such animals is, from our sources, somewhat confusing – deer were never sacrificial animals, so we should not imagine herds maintained by the sanctuary itself, as they did with domestic animals (see OX no. 13; SHEEP no. 12). The imagery of Artemis/Diana often shows her with deer, sometimes as hunter, but more often with tame deer, and they are also depicted with her female worshippers (Reeder 1995: figs 89, 91–2; Klinger 2002). Should we imagine that the deer at the sanctuaries were tame? Pausanias describes a tame deer at the sanctuary of Artemis at Lycosura in Arcadia which wore a collar (VIII.10.10), and Ovid, in his *Metamorphoses*, gives an extraordinary description of the stag sacred to the nymphs at Carthaea, which had gilded antlers and wore a necklace of jewels, earrings and a silver charm on its forehead (X.109–19). But such animals are easier to find in literature than in reality, and it is better to imagine sanctuaries of Artemis as places where wild deer could reproduce without fear of being hunted, and hence wild does and fawns were often seen.

Pausanias' description of the sacred deer at Lycosura also makes a remarkable claim about its age: he says that it was 'enfeebled by age', and wore a collar which explained that it had been caught as a fawn at the time of the Trojan War. Even though the source of the story was nine generations before 249 BCE, this would still make the deer centuries old. Pliny also refers to deer that had been given golden collars by Alexander the Great, which were found still alive a hundred years later (*NH* VIII.119). These stories are part of a persistent folk belief that deer lived extremely long lives, which lasted (in the face of efforts to disprove it, e.g. *Ar. HA* 578b 23–6) until medieval times (Bath 1979; see CROW/RAVEN).

8. Deer as status-markers

Fallow deer mandible from Fishbourne (photograph by kind permission of Prof Naomi Sykes)



COMMENT: Fallow deer, unlike red and roe, were spread into the Mediterranean by humans, and the fact that they are so often depicted in Greek art – most deer in wall-paintings and on pottery are fallow deer – indicates that they were desirable and high-status animals (Trantalidou and Masseti 2015). In recent years fallow deer in Europe have been extensively studied by the Dama International Project, and the evidence from Roman Britain has proved particularly informative. Originally it was thought that fallow deer products such as shed antlers and skins, but not living animals, were imported into Britain by the Romans, but a study of fallow deer remains at the palace at Fishbourne in 2006 was able to reveal some remarkable detail about the role of fallow deer there (Sykes et al. 2006). Two mandibles were found which could be dated to the first century CE, and the presence of teeth as well as bones allowed the isotopic analysis of the enamel, which carries a characteristic signature of the place where the deer lived as the enamel was laid down. By analysing teeth that grew earlier and later in the animal's lifespans, archaeologists were able to show that the older of the two mandibles belonged to a deer which originated outside Britain, perhaps in Gaul, Spain or even southern Italy, was imported to Fishbourne as a fawn and then lived there for some time before its death. The younger mandible was from a deer born and raised at Fishbourne, thus providing the first evidence for the import and establishment of breeding herds of fallow deer on Roman sites. A subsequent study suggested a similar process at Monkton on the Isle of Thanet (Sykes et al. 2011).

The strontium isotope ratios in the deer teeth at Fishbourne also indicated that the deer were domesticated rather than wild, implying that they were kept in a *vivarium* or deer park at the site.

In a study of the social meaning of deer in Roman Britain, Allen (2015) argues that this demonstrates that deer were more than simply game animals for hunting or eating: the fallow deer was a recognisable and high-value imported animal, so keeping a herd of deer acted as a status symbol, indicating control both of the landscape and of the animal world.

9. Sertorius' white deer

Plutarch Sertorius 11, 20

Nevertheless at that time Sertorius returned from Libya to Spain at the invitation of the Lusitanians. He immediately organised them as general with full powers, and brought the neighbouring regions of Iberia under his command, most of them accepting his leadership willingly because he was both mild and efficient; but also in some cases because of the strategies he devised to win them over, the most significant of which was the ruse of the deer, as I shall relate.

A commoner from the region named Spanos encountered a doe which had recently given birth, and which was fleeing a hunt. She eluded him, but he was struck by the unusual colour of her fawn which was completely white, so he pursued and caught it. It happened that Sertorius was presently camped in the region, and knowing that he was happy to receive the fruits of the field or farm brought to him as gifts, and was generous in his rewards to those who brought them, Spanos went off to bring him the fawn. Sertorius at first regarded the gift with no more than ordinary enthusiasm; but over time he made the doe fawn so tame and affectionate that she would come when called, and follow at his heels, completely ignoring the crowds and noise of the camp around them, and gradually he began to claim a divine origin for her, saying that she was a gift from Artemis and had the power to reveal secrets to him, knowing as he did how prone to superstition barbarians are. And he used further devices to strengthen his claims: if, for example, he received some secret intelligence that the enemy had attacked his territory or were fomenting revolt in one of his cities, he would announce that the doe had revealed it to him in a dream, bidding him have his forces ready. And again, if he received word of a victory from his generals, he would hide the messenger and bring out the doe, garlanded in celebration of good news, in front of the assembly, and tell his men to take heart and make sacrifices in expectation of receiving good fortune.

In this way he won the Spaniards' obedience and made them more open to all of his plans, because they thought they were being commanded not by the mortal plans of a foreigner, but by a god, and at the same time they were the more convinced because of the remarkable growth of his power.

[20] [At this time] Sertorius was terribly downhearted because his doe (which I described earlier) had gone missing, and he was deprived of his device for impressing the barbarians, who at that time were particularly in need of encouragement. Soon after, however, some men who were wandering about by night discovered the doe, and recognising her from the colour of her coat, recaptured her. When Sertorius heard the news, he swore the men to secrecy, giving them a handsome reward, and kept the doe hidden; a few days later he approached the platform to speak looking particularly cheerful, and told the leaders of the barbarians that the god had promised him some great good fortune in a dream. Then mounting onto the platform he began to deal with petitioners. The doe, which was being kept secretly close by, was let go, saw her master and went running joyfully up to the platform, and standing at his side she laid her head

on his knees and licked his right hand, as she always used to. Sertorius caressed her in return, and even wept a little; at first the crowd were completely astonished, then with applause and shouts of approval they escorted Sertorius home, believing him to be an extraordinary man who was beloved by the gods, filled with good cheer and hope.

COMMENT: Sertorius' doe belongs in a fine tradition of talismanic animals possessed by Roman leaders (see Plin, *NH* VIII.115, Plut. *Mar.* 17.3 = VULTURE no. 6), but certain aspects of the story seem rooted in fact: the idea of the fawn taken as a pet when its mother was hunted (above no. 3), the peasant's desire to gain a profit from an unusual animal and the suggestion that the tamed doe was free to wander by day, returning home at night. This last is reflected not only in Virgil's famous description of Sylvia's tame stag in *Aeneid* VII. 483–502 (to which Sertorius' doe certainly owes a great deal), but also in Roman law – the *Institutes* of Justinian contain a regulation on the ownership of animals (41.1.5.5) which makes provision for precisely this circumstance. The tale credits the deer not only with habituation to human society, but also the ability to recognise its owner and demonstrate affection: these aspects are more difficult to parallel in ancient accounts, apart from the mythological examples of Sylvia's deer and the sacred stag beloved by Cyparissos (Ov. *Met.* X.109–19), suggesting that genuine pet relationships with deer were unlikely. The same appears to be true of the Greek evidence: deer are not mentioned as pets in Greek literary sources (perhaps oddly, given the number of animal epitaphs in Hellenistic poetry), but do figure with children on the *choes* which illustrate scenes from the life of small children (e.g. GOAT no. 13), alongside more familiar pets such as dogs and birds. It is unlikely, however, that the images of deer ridden by children or driven harnessed to small carts (best illustrated in van Hoorn 1951) are realistic; the connection of deer with Artemis as protector of young children is probably relevant.

On the other hand, there are tales of emperors who drove chariots drawn by teams of trained stags (Mart. I.104; SHA *Elag.* 28; *Aur.* 33.3), and there is no reason to disbelieve such claims: reindeer have been domesticated as traction animals for centuries, but most species of deer are in general too small to be of use in regions which can support oxen or mules, so domestication of deer outside the far north has never been worthwhile. It is clear from the Roman references that in these cases large stags with impressive antlers were trained entirely for show, and these would be the most difficult to train and handle.

10. Antelope of the known world

a) Aristotle *Historia Animalium* 498b 32–499a 5

The animal called *hippelaphos* [lit. horse-deer = nilgai] has a mane along its withers, as does the creature called the *pardion* [unidentified]; in both a sparse mane runs from the head down to the withers. The nilgai is distinctive in having a beard on its throat. Both animals have horns and cloven hooves, though the female nilgai lacks horns. In size this animal is similar to the red deer. Nilgai live in Arachosia where wild oxen are also found.

b) Strabo *Geography* VII.4.8

Among Scythian animals is the creature called *kolos* (= saiga antelope), which is between a deer and a ram in size, white in colour, and runs faster than both. It drinks by drawing in water through its nostrils into its head, where it can store enough water to last it for several days, and so it can easily survive in arid country.

c) Pliny Natural History VIII.123–4

Among animals which change their colouring is also the Scythian *tarandrus* (= reindeer) . . . The reindeer is the same size as a cow, with a head greater than that of a stag, though similar in appearance, with branching antlers, cloven hooves and a coat as shaggy as that of a bear, which, when it has its own colour, is similar to an ass. Its hide is so hard that it is used to make cuirasses. When the reindeer is threatened it adopts the colour of the trees, bushes, flowers or landscape of the place where it is hiding, and thus it is rarely caught. It would be remarkable enough if it were able to vary the colour of its skin in this way, and is even more so because it is the fur which is variable.

Natural History XI.123

The antelope which is called *addax* in Africa has horns which are upright and twisted, with spiral ridges and sharp points, in the shape of a lyre, and from these it is called *strepsicerotus* (twisted-horn).

d) Oppian Cynegetica II.445–55

Another sharp-horned creature lives among the thickets, the fierce-spirited oryx, . . . In colour it is white as milk in springtime, except for its face, where its cheeks are black; it has a humped back, broad with fat. The sharp points of its horns rise high above its head, dark in colour; these horns are stronger than edged bronze or cold iron, or jagged stone. Some even say that they are poisoned. The oryx is by nature a fierce and aggressive animal.

COMMENT: Classical writers evinced much interest in different kinds of antelope from neighbouring countries. Among those described are the Arabian oryx, the saiga antelope of Scythia, the African screw-horn antelope and, at the edge of the known world, the nilgai and the reindeer. There is some garbling of detail in the descriptions – the reindeer changes colour as it sheds its winter coat, but does not have chameleon-like ability, and the large inflatable nose of the saiga antelope acts as a filter for dust and cold air, not as a drinking siphon – but all are sufficiently detailed to identify the antelope species securely. An indication of how knowledge of (and interest in) such foreign animals was spread is given by the dedications at the Samian Heraion from the archaic period: many animal remains were dedicated in the temple, among them the unworked horns of hartebeest, imported from Africa in the same way as ivory (Boessneck and von den Driesch 1981; see also CROCODILE no. 5 and HIPPOPOTAMUS no. 6). We find references to unusual antelope being brought to Alexandria (Athen. *Deipn.* 200f – saiga, oryxes and hartebeest) and to Rome (Symm. IX.44 – *addaces* and the unidentified *pygargoi*) as curiosities, and it is notable that the descriptions of these exotic antelope emphasise how much more interesting they are than native deer, because they are fiercer, more powerful or have strange abilities: they do not share the weakness and timidity seen as the defining characteristics of the deer.

Bibliography

- P. Albenda, 'Royal hunts: antlered and horned animals from distant lands', *Bulletin of the American Schools of Oriental Research* 349 (2008), 61–78.
M.G. Allen, 'Chasing Sylvia's stag: placing deer in the countryside of Roman Britain', in K. Baker, R. Carden and R. Madgwick (eds), *Deer and People* (Oxford 2015), 174–86.

- J. Aruz (ed.), *The Golden Deer of Eurasia: Scythian and Sarmatian treasures from the Russian Steppes* (New York 2000).
- M. Bath, 'The legend of Caesar's deer', *Medievalia et Humanistica* 9 (1979), 53–66.
- N. Beaux, *Le cabinet de curiosités de Thoutmosis III* (Leuven 1990).
- J. Boessneck and A. von den Driesch, 'Reste exotischer Tiere aus dem Heraion auf Samos', *MDAI* 96 (1981), 245–8.
- A. Cohen, *Art in the Era of Alexander the Great* (Cambridge 2010).
- B.J. Collins, 'On the trail of the deer: Hittite *kurala*' in G. M. Beckman (ed.), *Hittite Studies in Honor of Harry A. Hoffner Jr. on the Occasion of His 65th Birthday* (Winona Lake 2003), 73–82.
- K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
- J. Fletcher, *Gardens of Earthly Delight. The History of Deer Parks* (Oxford 2011).
- J. Fletcher, *Deer* (London 2014).
- P.F. Houlihan, 'Remarks on the deer (Cervidae) of ancient Egypt', *Journal of Egyptian Archaeology* 73 (1987), 238–43.
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- O. Keel, *The Symbolism of the Biblical World. Ancient Near Eastern Iconography and the Book of Psalms* (New York 1978).
- O. Keel, *The Song of Songs* (Minneapolis 1994).
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
- S. Klinger, 'On women with deer in black-figure vase-painting', *Numismatica e antichità classiche* 31 (2002), 11–43.
- M. Lichtheim, *Ancient Egyptian Literature. Volume II: The New Kingdom* (Berkeley 1976).
- M. MacKinnon, *Production and Consumption of Animals in Roman Italy: integrating the zooarchaeological and textual evidence* (JRA Suppl. 54) (Portsmouth, RI 2004).
- A. Mastrocinque, 'Sacred precinct: cattle, hunted animals, slaves, women', in U. Dill and C. Walde (eds), *Antike Mythen: Medien, Transformationen und Konstruktionen* (Berlin 2009), 339–55.
- J. Nollé, 'Boars, bears and bugs: farming in Asia Minor and the protection of men, animals and crops', in S. Mitchell and C. Katsari (eds), *Patterns in the Economy of Roman Asia Minor* (Swansea 2005), 53–82.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- J.E. Reade, 'The Rassam Obelisk', *Iraq* 42.1 (1980), 1–22.
- E.D. Reeder (ed.), *Pandora: women in classical Greece* (Princeton 1995).
- N.J. Sykes, J. White, T. Hayes and M. Palmer, 'Tracking animals using strontium isotopes in teeth: the role of fallow deer (*Dama dama*) in Roman Britain', *Antiquity* 80 (2006), 948–59.
- N.J. Sykes, K. Baker, R.F. Carden, T.F.G. Higham, A.R. Hoelzel and R.F. Stevens, 'New evidence for the establishment and management of the European fallow deer (*Dama dama dama*) in Roman Britain', *Journal of Archaeological Science* 38 (2011), 156–65.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- K. Trantalidou and M. Masseti, 'Archaeozoology of the red deer in the southern Balkan peninsula and the Aegean region during antiquity: confronting bones and paintings', in K. Baker, R. Carden and R. Madgwick (eds), *Deer and People* (Oxford 2015), 59–77.
- G. van Hoorn, *Choes and Anthesteria* (Leiden 1951).
- H.B. Walters, *History of Ancient Pottery, Greek, Etruscan and Roman* (London 1905).
- E. Yannouli and K. Trantalidou, 'The fallow deer (*Dama dama* L. 1758) in Greece: archaeological presence and representation', in N. Benecke (ed.), *The Holocene History of the European Vertebrate Fauna. Modern Aspects of Research* (Kiel 1999), 247–81.

GAZELLE

Twelve species of gazelle (medium-sized antelopes) inhabit the deserts and dry grasslands extending from central Africa to Mongolia. The *dorkas* described carefully by Aelian NA XIV.14 – grey below and brown above, with a black stripe on the flank and short horns – is plainly the *dorkas*

gazelle, found in antiquity in North Africa and Syria, and the Greek is still retained in its scientific name, *Gazella dorcas*. Other species, like the Palestinian gazelle (*Gazella arabica*), are pale beige, affording them good camouflage in the desert. The most distinctive characteristic of the gazelle is its horns (found on both males and females), which are ridged and lyre-shaped, bending backwards in a subtle S-shape. The horn's curve is sharper in the males than the females.

Gazelles favour the company of herds (multiple eyes and ears can then be employed to keep alert for danger), but when danger comes too close, the herd scatters into disarray, so that the predator does not know which individual to pursue. If a gazelle is serious about accelerating away from a predator, then it can reach speeds of fifty miles an hour, which it can maintain for about a hundred yards. Undoubtedly, astonishing speed is the most distinctive quality of the gazelle, and when coupled with its obvious elegance and beauty, it is little wonder that it was lauded in artworks, songs, hymns and prayers throughout the ancient Near East. The gazelle is amongst one of the most beautiful animals of antiquity.

The gazelle's fragility was proverbial and it was hunted with abandon; it is one of the most familiar animals in painted and sculpted hunting scenes from Egypt, the Levant and Mesopotamia. Recent evidence emerging from the Syrian and Negev deserts shows the widespread use of 'kites', two long walls with a broad opening leading to an apex in which gazelles could be driven and trapped. Recently christened 'death zones', these desert kites indicate that the mass slaughter of gazelles (of 'catastrophic mortality' – Matthews 2003: 86) and other ungulates was practised, but the manner of their capture suggests that the animals were intended to supplement the diet and not provide the pleasurable leisure of elite hunting (Borowski 1998: 189). The Hebrew bible (Genesis 27.3; Deuteronomy 12.15, 22) suggests that gazelle meat was a common commodity, and although somewhat dry, it is good for eating.

Among Greek writers gazelles are mentioned by Herodotus (IV.162) and Xenophon (*Cyr.* I.4.7) as inhabiting Libya and Persia, and they were familiar to Aristotle, who says that they are the smallest kind of antelope (*PA* 663 b 26). But there is no evidence for the presence of gazelles in classical Greece; the female name Dorcas, reflecting appreciation of the gazelle's delicacy and gentle nature, does not appear in Greece until the Hellenistic period (*LGP*N s.v. Dorkas). Under the Roman Empire, however, gazelles were far more widely encountered, and they are often mentioned as animals of the hunt: contemporary wall-paintings from Pompeii depict them attacked by dogs, and in still-life scenes where they have been captured alive, either for the kitchen or the *vivarium* (King 2001: 427–8, fig. 351). They are also shown in a fantastical scene, drawing little chariots for cupids (Toynbee 2013: fig. 69), in line with the idea of the gazelle as a child's pet (below), and the popularity of Dorcas as a Roman woman's name. Unsurprisingly, no physical remains of gazelles have been found in the town, suggesting that importing or keeping them was the province of the very rich.

1. Gazelle standing on desert ground

*Elephant ivory and wood sculpture, Egyptian New Kingdom,
XVIII Dynasty, reign of Amenhotep III, c. 1390–1353 BCE
(New York, Metropolitan Museum of Art 26.7.1292). Photograph
courtesy of The Metropolitan Museum of Art (www.metmuseum.org)*



COMMENT: This elegant ivory statuette of a gazelle (Egyptian, *gehes*), sadly lacking its ears and distinctive horns, is poised for flight upon its spindly, long legs. The desert home of the gazelle is neatly incorporated into the statuette (Arnold 1995: 10–11) as the animal stands on a wooden base that has been skilfully crafted to represent an undulating desert landscape with plants, scrub and bushes littered about. This object not only shows the gazelle as a thing of beauty and elegance, but as a desert animal with symbolic associations.

As a desert creature, the gazelle inhabits the place in which the transition between death and life takes place since all Near Eastern peoples regarded deserts and steppes as deadly and chaotic. Moreover, the Egyptian preference for exulting the feminine aspect of the gazelle (below no. 3) allows it to inhabit the same conceptual sphere as goddesses such as Tefnut, Hathor and Isis, as well as Anukis, the goddess of the First Cataract of the Nile, whose sacred animal the gazelle was. In fact, the goddess could often appear in gazelle form and was venerated in that way (see Keel 1994: 93 fig. 49). In Egypt the gazelle was therefore an icon of nature, life and renewal as well as an image of the feminine divine associated with these qualities (see comments in Keel 1994: 150; Vernus and Yoyotte 2005: 137–41).

2. Gazelle metaphors, similes and observations

a) Sumerian proverbs and similes, 3.80 (Alster 1997 (1): 94; Kramer 1969: 6)

A [timid?] gazelle in the [. . .] of the steppe
feeds its young with milk.

A gazelle not alert, a dog not on the watch. A man raising his hand in anger does not
see clearly.

Like a gazelle he is drinking fifteen days' worth of water.

Like a gazelle caught in a trap, they (the people of Ur) bit the dust.

I trapped them (the enemy) like a gazelle in the thicket.

b) Egyptian love song, Papyrus Chester Beatty I

O, that you might come to the sister quickly
Like a gazelle leaping in the desert
Its legs running though its limbs are weary
Terror enters its limbs
A hunter is after him, and dogs are with him
(Still) they do not see its dust.

c) Hebrew bible, 2 Samuel 2.18

The three sons of Zeruiah were there: Joab, Abishai and Asahel. Now Asahel was as
fleet-footed as a wild gazelle.

Hebrew bible, 1 Chronicles 12.8

Some Gadites defected to David at his stronghold in the wilderness. They were brave
warriors, ready for battle and able to handle the shield and spear. Their faces were the
faces of lions, and they were as swift as gazelles in the mountains.

Hebrew bible, Proverbs 6.5

Free yourself, like a gazelle from the hand of the hunter, like a bird from the snare of
the fowler.

Hebrew bible, Isaiah 13.14

Like a hunted gazelle,
like sheep without a shepherd,
they (the Babylonians) will all return to their own people,
they will flee to their native land.

Hebrew bible, Song of Songs 2.7, 9, 4.5

Daughters of Jerusalem, I charge you by the gazelles and by the does of the field: Do not arouse or awaken love until it so desires . . . My beloved is like a gazelle or a young stag. Look! There he stands behind our wall, gazing through the windows, peering through the lattice . . .

Your two breasts are like two fawns, like twin fawns of the gazelle that browse among the lilies.

COMMENT: The behaviour of the gazelle (Akkadian *ṣabītu*; Hebrew, *sebiyya*, *sebi*, *saba*, *seba'a*) enters into ancient Near Eastern metaphors and similes with some regularity. Its timidity, shyness and caution are frequently alluded to and hunting motifs, in which the gazelle is an easy target or hapless victim, are commonplace. But beyond that, in ancient Near Eastern love literature gazelles are often associated with both feminine sensuality and masculine virility. They frequently symbolise the excitement and swiftness of the male lover coming to see his beloved, as in the ancient Egyptian love song cited here, where each stanza begins with the refrain, 'O that you might come to the sister quickly.' Moreover, gazelles were often figures in Hebrew, Akkadian and Ugaritic literature for mighty warriors or virile young men. Although no human could really compete with the swiftness of a gazelle, men who were able runners and swift of foot were compared favourably with the animal. This burst of speed is what inspired the author of the Hebrew Proverbs to speak about getting out of an unsatisfactory agreement made with a neighbour – 'Free yourself, like a gazelle from the hand of the hunter' – and in his judgement speech against Babylon, Isaiah (13.14) declared that the Babylonians would one day flee like a startled gazelle from the lands they had conquered.

Seven of the sixteen instances where the gazelle is mentioned in the Hebrew bible occur in the Song of Songs, that supreme celebration of eroticism which has much troubled successive Jewish and Christian commentators over the centuries. On two occasions, gazelles are summoned to be witnesses to the romantic drama which unfolds in the lyrics (Song of Songs 2.7, 3.5), and it is possible that in the mind of the poet, the distinctive over-sized eyes and ears of the gazelle made it the ideal animal for the job.

3. The miracle of the gazelle

Egyptian inscription of the Middle Kingdom vizier Amenemhet (Lines 2–6; after Couyat and Montet 1913: 77–8; 1912: pl. 24)

This miracle which happened for His Majesty:
The animals of the desert came down to him.
And the pregnant gazelle came, walking;
her face was toward the people before her.
Her two eyes looked straight ahead.
She did not turn back until she arrived
at this noble mountain to this block.
It was in its place for this lid of this Lord of Life.
She gave birth on it.
This army of the king looked on.
And then her throat was cut,
being put on it as a burnt offering.

COMMENT: The Middle Kingdom vizier, Amenemhet, recorded an inscription when Mentuhotep IV sent him to Wadi Hammamat. The inscription records an omen of a gazelle which gave birth to her fawn atop the stone that had been chosen for the lid of the pharaoh's sarcophagus. This remarkable Middle Kingdom text, narrating the miracle of the gazelle, is carved into a square stone block and is accompanied by an image showing Mentuhotep offering two milk jars to the god Min. The text tells of the sudden appearance of a pregnant gazelle at the quarry site where the block of stone was being hewn by the pharaoh's workers and was intended to become the lid of a sarcophagus. The gazelle, confident, determined and unafraid, is shown choosing this block of stone as the place to give birth to its young. This event is described, accordingly, as a miracle since the gazelle's use of the stone relates it to the generative properties of the sarcophagus which was to be sculpted from the block. The sacrifice of the gazelle immediately after its labour emphasises the idea of resurrection. As Strandberg (2009: 176) explains,

The reference to the lid as the place where the gazelle gives birth reflects both the form of the block, as a slab suitable for the purpose and the future properties of the lid, where the image of the goddess Nut, the mother that will give the deceased new life, will be inscribed. The gazelle, as an animal of the desert landscape where the quarry is found, fits into the realistic level of the narrative. It also carries with it certain allusions, such as the imagery of the desert hunt, implying the mastery of this landscape, and the idea of resurrection that, as has been shown, is found in the identification of Gehesty, where Osiris is found and given new life . . . While relating a seemingly practical expedition to a quarry, these small texts imbue this activity with mythological implications.

Gazelles are pregnant for six months and females tend to alternate between standing and lying down during labour. Depictions of gazelles giving birth appear to be limited during the Old Kingdom to the royal mortuary temples of Niuserre and Unas and a unique example of a gazelle giving birth lying down is included in the Middle Kingdom tomb of Khnumhotep II at Beni Hasan (Newberry 1893: pl. 30): the mother turns back her head during labour as she watches out for danger (for images of gazelles with their fawns see Evans 2010: 178–80).

4. A gazelle fit for the gods

Neo-Assyrian Akkadian hymn (after Foster 1996: 663)

Oh Shamash, Lord of Judgment, Oh Adad, Lord of Divination, I bring and ask your blessing upon a pure fawn, offspring of a gazelle, whose eyes are bright-hued, whose features are radiant (?), a pure, tawny sacrificial animal, offspring of a gazelle, whose mother bore him in the steppe, and the steppe set its kind protection over him. The steppe raised him like a father, and the pasture like a mother. When the warrior Adad saw him, he would rain abundance (?) upon him in the earth's close: grass grew up, he would rejoice in (its) fullness, the . . . of the livestock would sprout luxuriantly. He would eat grass in the steppe; never would he want for water to drink at pure pools. He would feed on the . . . plants and then return (to his haunts). He who never knew a herdsman [. . .] in the steppe, from whom the lamb was kept away, I ask your blessing (upon him as my offering). Oh Shamash and Adad, stand by me! In what I say and pray, [in whatsoever I d]o, in the inquiry I ask your blessing on, let there b[e] truth!

COMMENT: This prayer is quite remarkable in the canon of Akkadian literature, notable for its lyrical and accurate portrayal of the growth and beauty of a young gazelle buck in the wilderness. The prayer was part of a group of diviner's incantations recited at the time of offering of specific animals.

There is a play on words in operation here since the Akkadian word for gazelle, *šabitu*, is a pun on *šabdu*, 'to seize', as in the seizure of the gazelle as a sacrificial victim. The gazelle played an important mythic role in Mesopotamia, where the father-god and god of wisdom, Ea, was known as 'the princely gazelle' and 'the gazelle who gives the earth' and it is likely that the animal was worshipped in totem form. Cylinder scenes show gazelle sacrifices, although the gazelle, was, seemingly, a very rare sacrificial offering, featuring only in the ceremonies for the month of Abu at Emar and the great festival of the moon god Nanna at Ur as well as in the festivals of Enlil and Ninlil. The offering of a young gazelle to the gods by the *baru* (diviner) when his work was not going well was acceptable – and this may be the inspiration behind this payer. It should be noted, though, that in Assyria, deer were sacrificed even less frequently than gazelle.

5. The gazelle in Rome

Martial Epigrams XIII.99

You will give the gazelle to your little son as a pet:
The crowd are wont to spare it, waving their togas.

COMMENT: Martial's epigram on the gazelle forms part of a book based on the theme of the Saturnalia feast (Leary 2001), and it demonstrates the complexity of Roman ideas about the animal. Although the couplet references the gentleness of the gazelle as its main quality, making it a suitable child's pet and an inappropriate animal for the arena, it appears in a series of poems celebrating game dishes to be served at a banquet. The second line refers to the custom of *missio* in the amphitheatre, when the crowd would signal to the emperor to spare the life of a defeated gladiator: the implication is that one would spare a gazelle for its timidity (an idea also found in *Spect.* 33). Whether gazelles were ever presented in the arena is more difficult to judge: there are references to *dammae* at the games of Gordian I and Probus (SHA *Three Gordians* 3.7, *Probus* 19), which may indicate gazelle or some other species of antelope, and they appear being captured in the Great Hunt mosaic at Piazza Armerina; it is hard to imagine, however, that the crowd would find much entertainment in the hunting of such a timid animal.

This is the only reference to keeping a gazelle as a pet at Rome: the claim in Oppian *Cyn.* I.440–1 that one might suckle hunting dog puppies on a gazelle to make them fleet-footed seems fanciful, as Oppian recommends the lioness and she-wolf as foster-mothers in the same passage. That they were eaten, however, seems certain, though in Rome gazelle appears to have been a luxury of the same type as flamingo (Athen. 9.397a; Juv. *Sat.* XI.136–40). Columella refers to gazelles among the game animals kept in *vivaria* (*De re rust.* IX.1.1) and it is listed alongside goat meat and venison in the Price Edict of Diocletian (4.45), perhaps reflecting its wider availability in other parts of the empire.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
D. Arnold, *An Egyptian Bestiary* (New York 1995).
N. Beaux, *Le cabinet de curiosités de Thutmosis III. Plantes et animaux du 'Jardin botanique' de Karnak* (Leuven 1990).

- O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (Walnut Creek 1998).
- M.M.J. Couyat and P. Montet, *Les inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât* (Cairo 1912).
- M.M.J. Couyat and P. Montet, *Les Inscriptions hiéroglyphiques et hiératiques du Ouâdi Hammâmât* (Cairo 1913).
- L. Evans, *Animal Behaviour in Egyptian Art* (Oxford 2010).
- B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 1996).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- O. Keel, *The Song of Songs* (Minneapolis 1994).
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
- S.N. Kramer, 'Sumerian similes: a panoramic view of some of man's oldest literary images', *Journal of the American Oriental Society* 89 (1969), 1–10.
- T.J. Leary, *Martial Book XIII: the Xenia: text with introduction and commentary* (London 2001).
- Lexicon of Greek Personal Names* (Oxford 1987–)
- M. Lichtheim, *Ancient Egyptian Literature. Volume II: The New Kingdom* (Berkeley 1976).
- R. Matthews, *The Archaeology of Mesopotamia: theories and approaches* (London 2003).
- M.P.E. Newberry, *Beni Hasan I* (London 1893).
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- Å. Strandberg, *The Gazelle in Ancient Egyptian Art. Image and Meaning* (Uppsala 2009).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).

BEAR

The brown bear (*Ursus arctos*) was widespread across Europe, Asia and North Africa in antiquity, and the Syrian bear (*Ursus arctos syriacus*) was the species best known throughout the ancient Near East – it is still to be found in the hills of northern Syria, southern Turkey and north-western Iran. In fact, the brown bears found throughout the northern hemisphere are thought by some zoologists to constitute a single species, divided geographically. The Old World bears are the slightest and lightest of the species, weighing some 500 pounds; they are also the palest, with light brown fur.

Classified as carnivores, bears are actually omnivorous, happy to feed on plants, shrubs, fruits and grass, as well as on fish, insects, honey and the flesh of anything they may come upon, including carrion. Bears hibernate (as alluded to in one Sumerian proverb, Collection 8b.14), avoid the company of humans and are, by and large, solitary creatures, but when driven to hunger they will venture into human habitation looking for food; this is when they can be at their most dangerous. Female bears guarding their cubs are highly volatile too (on bears in the wild and as a cultural symbol see Pastoureau 2011; Bieder 2005). In spite of this, it is possible that in antiquity men risked their lives taking cubs alive in order to trade them (see below no. 1).

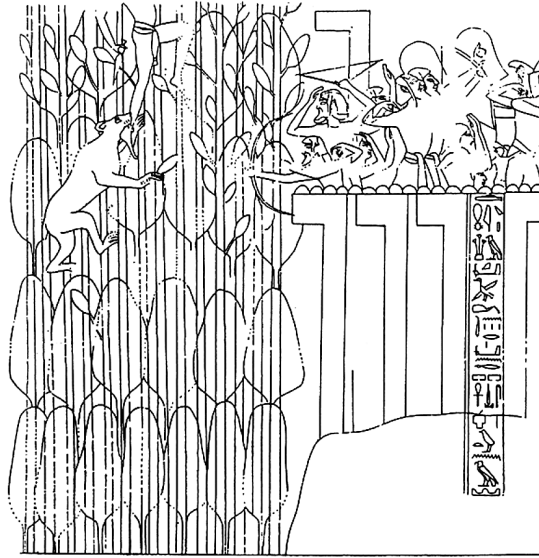
Attitudes towards bears differed strongly between Greece and Rome. The bear figured in Greek myth and ritual, undoubtedly because of its very human characteristics of upright stance and skill in foraging: it figures in tales of metamorphosis and was important in the cult of Artemis, most notably at Brauron in Attica (below no. 4). Yet although bears were common in the north of Greece and in the mountains of the Peloponnese, they played little actual part in Greek life: they were not favoured animals of the hunt (perhaps for the reasons above), nor do they appear in literature as a threat to flocks in the same way as the wolf. For the Romans, on the other hand, the bear was more mundane: while bears did inhabit the mountains of Italy, the Romans chiefly encountered them in the arena, as hunted animals or trained performers. They figure far less often as cult animals, except on the Celtic fringes of the Roman Empire, where the bear-goddess Artio

was worshipped (Toynbee 2013: fig. 37), and where small bear figurines made of jet were placed in Romano-British children's graves as protective talismans (Crummey 2010).

Tantalising references to pale or white bears have led some to believe that polar bears were also seen at Rome, but this is most unlikely. The 'white she-bear' which walked in the Grand Procession of Ptolemy Philadelphos in the 270s (Athen. *Deipn.* 201c) was certainly just a paler version of the brown bear – Pausanias VIII.17.3 refers to 'white bears' in Thrace – while the description in Calpurnius Siculus of bears chasing seals in the arena (*Ecl.* VII.65–6) cannot be taken to imply swimming polar bears, an idea which seems to have originated with Jennison (1937). It is most unlikely that Roman naturalists would have failed to mention such a striking creature given their knowledge of other northern animals such as the reindeer (Theophr. fr. 172; Pliny *NH* VIII.123).

1. A bear attack

Line drawing of an Egyptian wall-relief from the Temple of Amun, Thebes, New Kingdom, XIX Dynasty, reign of Ramses II, c. 1260–1250 BCE (after Spalinger 2011: fig. 13)



COMMENT: In the ancient Near East the bear (Egyptian *htmt*; Hebrew *dōb*; Akkadian *dabū*) was the paradigm of a dangerous animal. This remarkable image depicts the Egyptian siege of the fortress of Satuna in Syria. The detail shows a Syrian fugitive attempting to climb a tree in a dense forest to escape a bear which has, unfortunately for him, already grabbed his leg in its jaws; the man's fate is sealed. The dramatic vignette recalls an episode in Papyrus Anastasi I where the prince of Asher is discovered in a balsam tree by a hungry bear (Houlihan 2001: 60). The literary account is meant to entertain, but the wall-relief depicts a moment of real terror (note the soldiers on the ramparts, shouting, gesticulating and attempting to shoot the animal with arrows). Ancient peoples knew the bear to be a ferocious killer.

A curiously grisly episode recorded in the Hebrew bible sees the prophet Elisha cursing a large gang of boys for mocking his baldness. Calling upon the vengeance of Yahweh, 'two female bears came out of the woods and tore up forty-two lads' (2 Kings 2.24). She-bears (Hebrew *dubbāh*; Akkadian *dabītu*) can be particularly aggressive animals, especially if nursing or protecting

cubs as recognised in Proverbs 17.12: 'Let a man meet a bear robbed of her cubs / Rather than a fool in his folly.' Hushai the Archite describes King David and his soldiers 'as desperate as a wild she-bear robbed of her cubs' (2 Samuel 17.8) and, as an image of uncontrollable rage, Yahweh threatens to be, 'like a she-bear robbed of her young . . . attacking them and ripping open the casing of their hearts' (Hosea 13.8). The nightmarish quality of a bear-attack is conjured up by the prophet Daniel who sees a bear raised up on its hind-legs, 'and three ribs were in its mouth between its teeth' (Daniel 7:5).

2. 'Lions (no tigers) and bears, oh my!'

a) Hebrew bible, Amos 5.18–19

Why do you want the day of the Lord? It is darkness, not light; as if someone fled from a lion, and was met by a bear; or went into the house and rested a hand against the wall, and was bitten by a snake.

b) Hebrew bible, Proverbs 28:15

Like a roaring lion and a rushing bear
Is a wicked ruler over a poor people.

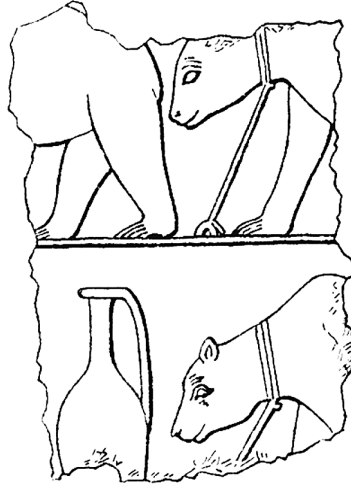
c) Hebrew bible, 1 Samuel 17.34–7

David said to Saul, 'Your servant has been keeping his father's sheep. When a lion or a bear came and carried off a sheep from the flock, I went after it, struck it and rescued the sheep from its mouth. When it turned on me, I seized it by its hair, struck it and killed it. Your servant has killed both the lion and the bear; this uncircumcised Philistine will be like one of them, because he has defied the armies of the living God. The Lord who rescued me from the paw of the lion and the paw of the bear will rescue me from the hand of this Philistine.'

COMMENT: The Hebrew bible often links the bear with the lion as the two most dangerous carnivores known to mankind. As powerful predators which threatened herds and flocks, both were feared, but the bear was considered to be particularly problematic because of its unpredictability – that is the background to the Hebrew Proverb: subjects forced to live under the whims of a capricious king are as helpless as if in the path of a ferocious lion or bear. The prophet Amos creates a vivid scenario of an encounter with both animals in his prophecy concerning the Day of the Lord (Judgement Day) – the biblical equivalent of the English saying 'out of the frying-pan and into the fire.' The vividness of a meeting with this terrifying duo is elucidated in Lamentations 3.10: 'Like a bear lying in wait, like a lion in hiding. . . , dragging me from the path and mangling me.' Consequently a confrontation between a human, a lion and a bear is a feat of heroism and tremendous courage, as a youthful David (addressing King Saul's reservations about his abilities to fight Goliath) makes clear. The slaughter of bears and lions – or even the aspiration to kill them – is laudable. Thus, in a letter dated to the reign of Hattusili I (c.1586–1556 BCE), Zukrasi of Aleppo uses the motif of the predator bear becoming the prey to genuine heroic effect: 'Go to the ruler of Hassu say: "I will go [. . .] and (you) come against (me)! [If] you do not come I will hunt (?) you like a bear, and you will die with a cry of pain!"' (after Collins 2002: 241–2; for the use of other animal terms to designate the enemy, see Miller 1970: 177 n. 2).

3. Captive bears from Syria

Line drawing after an Egyptian painted relief from the mortuary temple of Sahure at Abusir, V Dynasty, c. 2487–2475 BCE



COMMENT: This exquisite relief, considered to be one of the masterpieces of Egyptian representations of the natural world, is the earliest visual evidence for the vogue for importing foreign animal species into Egypt. Three Syrian bears, together with a high-necked Syrian flask, are beautifully delineated and represent some of the gifts or trophies obtained during a sea trip to the trading port of Byblos, on the coast of Phoenicia. Houlihan (1996: 195) notes that ‘the large, stocky build and peculiar posture of these carnivores has been rendered with prodigious skill and is surely the product of direct observation of the living species.’ Bears were known to the Egyptians only through importation (*contra* Herodotus II.67) and their appearance in Egyptian art is highly sporadic. Many of the eight known examples date from the XVIII Dynasty, during the height of the Egyptian empire when the vogue for exotica was at its peak. Bears are shown wearing collars and leashes (see Osborn and Osbornova 1998: 81–3 and ELEPHANT no. 2) and even, as here, tied to the ground. These bears are clearly on display.

Assyrian monarchs also used bears as exotic spectacles and one remarkable text tells how a captive Babylonian ruler was tied up to the inner gate of the city of Nineveh alongside a bear (Chicago Assyrian Dictionary s.v. *dabû*). An inscription of Esarhaddon recalls how the king put a captive enemy ‘in a neckstock and bound him together with a bear and a dog and made him stand guard at the gate of Nineveh’ (Chicago Assyrian Dictionary sv. *kalbu*; see further LION). There is, however, no direct evidence for bears being used as entertainment in the Near East before the Roman period.

4. The mystical bear

Silver triobol, Mantinea, c. 490 BCE



COMMENT: The polis of Mantinea in Arcadia adopted the bear as the identifying symbol on its coinage between 500 and 385 BCE: it is depicted either on all fours, as here, or simply as a head, with a variety of reverse devices including acorns, oak leaves and dolphins. The bear is often interpreted as representing the nymph Kallisto, who was metamorphosed into a bear by Hera, and was the mother of Arkas, eponymous founder of Arkadia (Ov. *Met.* II.405–507). Because of the prominence in our sources of the bear-cult of Artemis at Brauron in Attica it is easy to overemphasise the significance of the bear in Greek religion: Artemis at Brauron did indeed have a bear as her sacred creature, and her cult included young girls playing the role of *arktoi* at the sanctuary (Kahil 1977). But the bear was only one of a number of wild creatures sacred to Artemis, and is in fact far less common among her votive offerings across Greece than water birds (see SWAN and Bevan 1987). In reality the bear was not a creature that one would expect to encounter in any but the wildest regions, and for this reason it was distinctive to Arcadia, inhabiting the wild mountains when it had retreated from other parts of Southern Greece (Pausanias VIII.23.9; see also I.32.1, III.20.5; Yannouli 2003: 183–4).

5. Habits of bears

Pliny Natural History 8.125–31

The porcupine hibernates during the winter, as do many animals, most notably bears. Bears mate at the start of winter, not as most quadrupeds do, but by lying down together and hugging; then the females retreat on their own to a cave and give birth to up to five cubs after thirty days. At birth the cubs are pale and shapeless, little larger than mice and without eyes or fur, but even so they have claws. The mother bear gradually shapes them by licking. It is very rare to see a bear give birth. The males hibernate for forty days, and the females for four months. If they do not have a cave, they build a den of branches and brushwood which is dry and lined with soft leaves. For the first fourteen days they sleep so soundly that even an injury will not wake them, and it is amazing how they become fat while asleep. (Their fat is very useful as a medicine, and a remedy for baldness.) After this initial period they lose their fat and survive by sucking on their forepaws. When their cubs are cold they lie over them and warm them as birds sit on their eggs. Theophrastus makes the astonishing claim that at this time of year even cooked bear flesh, if it is set aside, will grow in size, and that no trace of food is to be found in the bear's stomach, only a little water, and just a little blood around the heart, with none in the rest of the body. The bears emerge in spring, the males still very fat (something which is difficult to explain) as they have not been fattened by sleep except for the first fourteen days, as noted above. When they come out of hibernation they eat a certain herb called arum

to unbind their intestines, which are otherwise blocked, and they rub their teeth on the new branches to get them into practice. Their eyes are weak, so they seek out beehives, in order for the bees to sting their face and get the blood flowing in their head.

The head is a bear's weakest part, just as it is the lion's strongest, and for this reason if they are forced by the chase to jump from a crag, they cover their head with their paws, and in the arena they are often killed by a blow to the head. The Spanish believe that a bear's brain is poisonous, and therefore burn the head of any bear killed in the games before witnesses, since the poison, if drunk, causes 'bear-madness'. Bears can even walk on two feet, and they come down trees backwards. When fighting bulls they wear them out with their weight by hanging onto their face and horns with all four feet; and though they are stupid, no other animal is so cunning in attack. The annals record that in the consulship of M. Piso and M. Messala [61 BCE] Domitius Ahenobarbus, the curule aedile, presented a *venatio* of a hundred Numidian bears and as many Ethiopian hunters, though I am surprised at the reference to Numidian bears, since it is known that there are no bears in Africa.

COMMENT: Pliny's description of bears' habits is based largely on that of Aristotle (*Hist. An.* 579a 18–30, 600a 27–b 12), but combines the latter's factual observations with elements of superstition. The idea that bear cubs are born unformed and licked into shape by their mother, vividly described by Aelian (*On Animals* II.19), held great sway in antiquity and contributed to the bear's reputation as a devoted parent: Suetonius used it as a metaphor for poetic composition (*Vita Verg.* 22). Pliny strangely credits the bear with both stupidity and cunning: it is not prominent in tales of animal intelligence, appearing only once in Plutarch's *On the Intelligence of Animals* (at 971e), for the she-bear's trick of retreating backwards into her den to foil pursuers. But the claim of cunning may have come about from the ruses adopted by hunters for the capture of bears: as powerful and ferocious creatures which needed to be caught alive, bears posed a particular challenge, and works such as Oppian on hunting go into great detail about nets, hides, snares and scarers (*Cyn.* IV.354–424).

Combat between a bear and a bull, mentioned here, seems to have been a staple entertainment in the arena: the gory gladiator mosaic from Zliten illustrates the fight, bear and bull chained together to ensure that they fight to the death (Dunbabin 1978: fig. 48). Various explanations have been offered for Pliny's erroneous claim that there are no bears in Africa, but the most likely is that bears were simply thought of in Roman times as northern creatures, along with the elk and aurochs, mirroring the elephants and lions of the south.

Bibliography

- E. Bevan, 'The goddess Artemis and the dedication of bears in sanctuaries', *ABSA* 82 (1987), 17–21.
 R.E. Bieder, *Bear* (London 2005).
 D.L. Bomgardner, *The Story of the Roman Amphitheatre* (London and New York 2000).
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 B.J. Collins, 'Animals in Hittite literature', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002).
 N. Crummy, 'Bears and coins: the iconography of protection in late Roman infant burials', *Britannia* 41 (2010), 37–93.
 K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
 P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 P.F. Houlihan, *Wit and Humour in Ancient Egypt* (London 2001).
 G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
 L. Kahil, 'L'Artémis de Brauron: rites et mystère', *Antike Kunst* 20 (1977), 86–98.
 K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
 P.D. Miller Jr, 'Animal names as designations in Ugaritic and Hebrew', *Ugarit-Forschungen* 2 (1970), 177–86.

- M. Moltesen, 'Three little bears', in K. Ascani et al. (eds), *Ancient History Matters: studies presented to J.G. Skydsgaard on his seventieth birthday* (Rome 2002), 277–87.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- M. Pastoureau, *The Bear. History of a Fallen King* (Cambridge 2011)
- A. Spalinger, 'Re-Reading Egyptian military reliefs', in M. Collier and S. Snape (eds), *Ramesseid Studies in Honour of K. A. Kitchen* (Bolton 2011), 475–92.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- E.Yannouli, 'Non-domestic carnivores in Greek prehistory: a review', in E. Kotjabopoulou (ed.), *Zooarchaeology in Greece: recent advances* (London 2003), 175–92.

LION

Terrifying, impressive, powerful and noble, the lion dominates ancient art and literature. The lion was antiquity's largest carnivore and consequently captured the ancient imagination as no other animal: there are more than 150 references to the lion in the Hebrew bible alone (Strawn 2005). The maneless Asiatic lion (*Panthera leo persica*) was native across the Near East, with some presence in North Africa too, while the Atlas or Barbary lion (*Panthera leo leo*), now extinct in the wild, was most common north of the Sahara (Jackson 2010: 17–21). Surprisingly, given its prominence in the arts and literatures of the Near East, actual lion bones are rarely found and even in Egypt evidence for the lion (Egyptian *m33f*) comes almost solely from iconography and textual sources (Osborn and Osbornova 1998: 113–19). It is difficult to know when lions became extinct in Egypt, but it appears that while they thrived in the early Dynastic age, by the New Kingdom they were already becoming scarce.

Across the Near East the lion was admired for its majestic appearance, ferocity and strength and became a widespread symbol of kingly majesty – in Egypt the blending of lion and pharaoh is apparent in the image of the sphinx, while many ancient kings sat upon leonine thrones (Llewellyn-Jones 2013: 70–1). Numerous leonine deities (Apedamak, Mahes, Mekhit, Mestjet, Pakhet, Ruty and Shesmetet) were found in the Egyptian pantheon and no gods were more widely respected and feared. The most important of these was the goddess Sekhmet, the lioness-headed daughter of Re, whose dual personality included a protective healing aspect as a deity connected to medicine and health, and a more ferocious destructive aspect, the divine symbol of the pharaoh's prowess in battle. Even the unforgiving hot desert winds were thought to be 'the breath of Sekhmet' (Wilson 2003: 176–83).

The lion's story in classical antiquity is one of gradual disappearance: while some bones are found at Bronze Age sites in the Peloponnese, the lion had vanished from mainland Greece before the classical period, and was extinct in Northern Greece by the first century CE. At Rome it was an infrequently imported animal, first seen in 186 BCE (Livy XLIX.22.1–2) and then known only as an arena beast or a tamed pet of the very rich. According to Sallares (1991: 401–4) the lion's disappearance from Europe owed more to climate and habitat change than human influence, but as the Roman empire expanded and wild beasts were extensively hunted for the arena, lions also became rarer in North Africa and Asia. Nevertheless, the presence of the lion in classical art and literature belies their scarcity in real life: it continued to be one of the most important creatures in the classical mind from early Greece to late antiquity. In art, the lion takes pride of place, from the Lion Gate at Mycenae to the friezes of Greek vase-painting, and from the mosaics of Pompeii to the Corbridge Lion (Toynbee 2013: fig. 18). Roman artists demonstrate a much more accurate knowledge of lions' appearance than their Greek predecessors, no doubt because of the opportunities at Rome to see live lions: the painter Pasiteles was, according to Pliny, sketching a lion in a cage at Ostia for a relief when he was attacked by an escaped leopard (Pliny *NH* XXXVI.40: see LEOPARD).

1. Guardian lion

***Bronze foundation peg from Urkesh, Syria c. 2200– 2100 BCE
(New York, Metropolitan Museum of Art 48.180). Photograph courtesy
of The Metropolitan Museum of Art (www.metmuseum.org)***



COMMENT: This figurine of a lion from north-east Syria shows the animal snarling and roaring and is cleverly crafted into the shape of a foundation peg with its forelegs outstretched across a plaque bearing a Hurrian cuneiform inscription: 'Tishatal, ruler of Urkesh' (modern Tell Mozan). Pegs of this and other designs formed dedicatory foundation deposits in Sumerian temples and the practice was readily adopted by the northern Hurrian kings of Urkesh. Of course, the powerful image of the lion (Akkadian *girru*, *labbu*, *nēšu*) as a guardian figure was adopted throughout the whole of the Near East and in this particular example the animal's upper body is portrayed with absolute realism: his claws are unsheathed and his ears and whiskers are pressed close to his head, as if in anger. Holding his head high, he opens his jaws, bares his teeth and roars, frightening away any enemies and protecting the temple pegs from displacement or vandalism and thereby retaining the temple's integrity.

2. Lion-watching in the Hebrew bible

Isaiah 5.29

Their roar is like that of the lion,
they roar like young lions;
they growl as they seize their prey
and carry it off with no one to rescue.

Amos 3.4, 8, 12

Does a lion roar in the thicket
when it has no prey?
Does it growl in its den
when it has caught nothing? . . .
The lion has roared—
who will not fear? . . .
As a shepherd rescues from the lion's mouth
only two leg bones or a piece of an ear,
so will the Israelites living in Samaria be rescued,
with only the head of a bed
and a piece of fabric from a couch.

Nahum 2.11–12

Where now is the lions' den,
the place where they fed their young,
where the lion and lioness went,
and the cubs, with nothing to fear?
The lion killed enough for his cubs
and strangled the prey for his mate,
filling his lairs with the kill
and his dens with the prey.

Isaiah 31.4

As a lion growls,
a great lion over its prey—
and though a whole band of shepherds
is called together against it,
it is not frightened by their shouts
or disturbed by their clamour—
so the Lord Almighty will come down
to do battle on Mount Zion and on its heights.

Proverbs 30.29–31

There are three things that are stately in their stride,
four that move with stately bearing:
a lion, mighty among beasts,
who retreats before nothing;
a strutting rooster, a billy-goat,
and a king secure against revolt.

COMMENT: Of the more than 150 references to the lion in the Hebrew bible, the word '*ari*' occurs over thirty times, with its alternative form, '*aryēh*', making over forty appearances. A young lion is referred to by the Hebrew word *kepir* while a cub is *gur*. A lioness is distinguished from a

male by the words *lābi* and *lebiyya*. This lexical richness suggests that the ancient Israelites were very familiar with this impressive and dangerous animal. While many references in the Hebrew bible refer to the lion in a metaphorical or symbolic fashion, something of their natural habits can be gleaned from the many texts which focus on lions killing and eating (for the most detailed study of the lion in ancient Israel and the Near East see Strawn 2005). This suggests that lions came into contact with humans often enough to be a potential danger to livestock.

The authors who describe the lion's anatomy and physiology tend to focus on its paws, mane and jaws (1 Samuel 17.34, 35, 37; Daniel 6.28; Amos 3.12) but they also describe its habitat. More than anything, though, the writers of the Hebrew bible show great interest in differentiating between the various vocalisations of lions (Foreman 2011: 169–71). These range between groans of agony (Psalms 22.2, 32.3, 38.9), roars of aggression (Isaiah 5.29; Jeremiah 2.15, 25.30; Ezekiel 19.7; Hosea 11.10), warning growls (Amos 3.4) and defensive snarls when guarding a carcass (Isaiah 34.4). Although lions do not roar when they hunt, the Hebrew authors enjoy using the sound of an aggressive lion as an effective metaphor for Yahweh's punishment of Israel or her enemy nations.

3. Royal lion pit

Hebrew bible, Daniel 6.16–24

So the king (Darius) gave the order, and they brought Daniel and threw him into the lions' pit . . . A stone was brought and placed over the mouth of the pit, and the king sealed it with his own signet ring and with the rings of his nobles . . . At the first light of dawn, the king got up and hurried to the lions' pit. When he came near the pit, he called to Daniel in an anguished voice. . .

Daniel answered, 'May the king live forever! My God sent his angel, and he shut the mouths of the lions. They have not hurt me, because I was found innocent in his sight. Nor have I ever done any wrong before you, Your Majesty.'

The king was overjoyed and gave orders to lift Daniel out of the pit. And when Daniel was lifted from the pit, no wound was found on him, because he had trusted in his God.

At the king's command, the men who had falsely accused Daniel were brought in and thrown into the lions' pit, along with their wives and children. And before they reached the floor of the pit, the lions overpowered them and crushed all their bones.

COMMENT: Daniel provides compelling evidence for the existence of lion enclosures in ancient Near Eastern palaces, a place to house and care for royal lions who were employed – as the text suggests – as royal instruments of punishment, or as high-status tribute gifts, or even as pets. Sadly, the evidence for the containment of lions in an underground pit which could be sealed with a stone is not found anywhere else and perhaps instead of thinking of an underground chamber, we should imagine the pit (Aramaic *gōb*) as a sunken animal pen (see comments by van der Toorn 1998 and Strawn 2005: 38–9). Mesopotamian and Egyptian evidence exists to confirm the existence of lion enclosures. Urad-Gula, a courtier of Ashurbanipal of Assyria, stresses his loyalty by proclaiming, 'Day and night I pray to the king in front of the lion's pit' (Holm 2013: 466). A Neo-Assyrian text labels the royal court with its antagonistic (sometimes vicious) inhabitants as 'the lion pit' (van der Toorn 1998). Egyptian evidence from Karnak dating early in the reign of Akhenaten shows lions kept in pens which could be viewed from terraces or balconies approached from stairs. It has been suggested that this royal lion enclosure resembled a medieval bear-pit, such as the one preserved in Berne (Janssen and Janssen 1989: 57).

That lions were present in ancient courts cannot be doubted. Lions could be captured and transported to royal enclosures, such as the fifteen lions and fifty cubs captured by Ashurnasirpal II and subsequently raised in captivity in Kalhu. Lions could be sent to palaces as tribute, as is the case with a lioness and her two male cubs represented at Persepolis, a diplomatic gift from the Elamites to the Persian Great King (Root 2003), or they could be bred in captivity. Images from Assyria show tame lions and lionesses relaxing in palace gardens, in the shade of date palms, and reliefs from New Kingdom Egypt show pet lions in the company of the pharaohs Tutankhamun, Ramses II and Ramses III, and Ramses VI. Indeed, Ramses II took his lion, named Slayer of his Foes, on campaign with him and the animal is represented outside the royal tent within the Egyptian camp erected near Kadesh (Holm 2013: 467; Shaw 2012: 129).

Middle Assyrian evidence from the Akkadian cuneiform archive of Mutta the Animal-Fattener shows that of the many sheep, goats, lambs and kids which poured into royal palaces bound for the royal table or sacrificial altar, a number of the small cattle were destined for the royal lion enclosures to feed the adult animals (*ni-še*) and the *ṣaḫ(ly)arāte* – ‘the sons of lions’, i.e. lion cubs (Postgate 2014: 191–2). The royal household fed its lions regularly: on average they received a sheep (or its equivalent) every two days. One entry in the archive stands out for comment, as we read that King Ninurta-Tukal-Aššur ordered that an ox be gifted to Samu, a eunuch, ‘as the lion seized him’. In other words, the eunuch seems to have received compensation for having been attacked by one of the king’s lions.

4. Ritual slaughter of lions in Assyria

a) Line-drawing of a detail from a gypsum wall panel relief from the north palace of Ashurbanipal at Nineveh, c. 645–635 BCE (London, British Museum 124874)



***b) Akkadian inscriptions carved onto hunting reliefs
from Nineveh (after Luckenbill 1989: 391–2)***

I am Ashurbanipal, king of the universe, king of Assyria . . . The lions which I slew – the terrible bow of Ishtar, lady of battle, I aimed upon them. I brought an offering, I poured out wine over them.

I am Ashurbanipal, king of the universe, king of Assyria. For my pleasure, on foot I seized a fierce lion by the tips of his ears . . . I pierced his body with the lance of my hands.

I, Ashurbanipal, king of the universe, king of Assyria, in my kingly sport I seized a lion by the end of his tail . . . I smashed his skull with the club of my hand.

I, Ashurbanipal, king of the universe, king of Assyria, in my kingly sport, they let a lion of the plain out of his cage and on foot with my spear shaft I . . . [] . . . but did not end his life . . . I stabbed him later with my iron girdle dagger and he laid down his life. . .

I, Ashurbanipal, king of the universe, king of Assyria . . . I went forth. In an open space in the plain, fierce lions, dreadful children of the mountains, came out. They surrounded the chariot, my royal vehicle . . . I shattered the might of those lions.

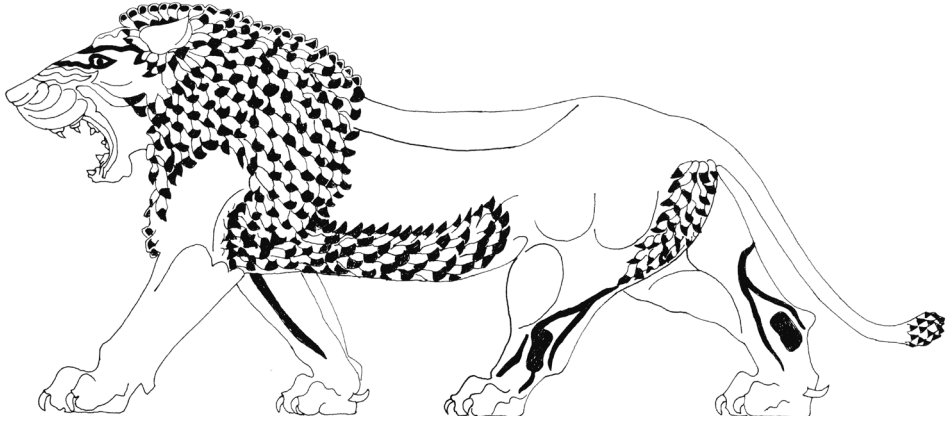
COMMENT: Assyrian rulers boasted of their prowess in slaying countless lions and King Ashurbanipal in particular delighted in representing himself as a hunter and boasted of his exploits in hyperbolic cuneiform inscriptions. It is clear, however, that the so-called ‘lion hunts’ of Ashurbanipal need rebranding, since the lions were actually killed in tightly controlled spaces – arenas by any other name. For the elite of the Assyrian court, the hunt became an elaborate ritual encrusted with jargon and ceremonial which served to validate the king’s right to rule.

After shooting arrows through countless lions from the safety of his high-sided chariot, the monarch performed the final act of ritual slaughter, grasping a lion by the throat and stabbing it in the belly as it stood facing him (this feat was possible given that the Asiatic lion was smaller than its African counterpart; Reade 1988: 72–9; Allsen 2006; Jackson 2010: 158–61). Palace reliefs, showing the carcasses of lions piled in front of altars as a final gesture of religious offering, are accompanied by royal inscriptions: ‘The lions that I killed; I held the fierce bow of Ishtar, Lady of Battle, over them. I set up an offering over them and I made a libation over them’ (Russell 1999: 202). Thus the ‘hunt’ morphed into a sacrifice.

The Assyrian ideology of the ‘hunt’ was inherited by the Persians. On his personal name-seal, Darius I is depicted shooting arrows at a rearing lion, while the carcass of another slain feline lies beneath his chariot’s wheels and the Achaemenid ruler is depicted slaying real or mythic lions or lion-hybrids by plunging his sword into the belly of the monster. Occasionally the monarch strangles a lion in the crook of his left arm. In these ritualised combat scenes, where the lion represents chaos and disorder, each Assyrian and Persian king becomes a ‘Master of Animals’, restoring order to their countries (see further Garrison 2010).

5. Lion from Babylon

*Line drawing of a glazed brick composition from Babylon,
Neo-Babylonian period, reign of Nebuchadnezzar II, 604–562 BCE
(New York, Metropolitan Museum of Art 31.13.2)*

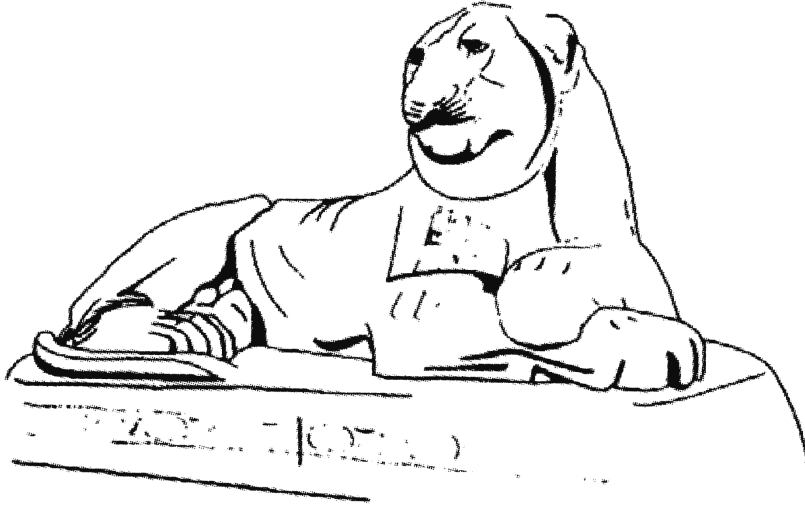


COMMENT: Nebuchadnezzar's great Babylonian building project focused especially on the rich brick decorations of the walls of temples, gates and palaces where protective beasts (realistic lions, bulls (or aurochs) and mythical dragon-like *mušḫuššu*) were interspersed in gloriously coloured glazes. The great processional way which led into the city through the monumental and beautiful Ishtar Gate was lavishly adorned with about 120 images of lions made of glazed bricks. As symbols of the war-like prowess of Ishtar, the lions were thought of as protecting the Processional Way, particularly during the sacred New Year's Festival when the gods of the city were carried in procession through the Ishtar Gate and into the temples lying at the heart of Babylon where the monarch and the high priest conducted the rituals which guaranteed the fertility of the country for the coming year.

Each of the lions is depicted in profile, a standard form of representation for this creature in the conventions of two-dimensional Near Eastern art. Nevertheless, there is a vivid liveliness to the images: the lion bares his fangs by furrowing his facial muscles, his eyes are wide open and his ears are pinned back. With his tail arched, the lion advances forward at a confident trot as though fixed on taking prey. The moulding of the bricks gives the lion's accurately proportioned body a kind of three-dimensionality which serves to emphasise its bulk and taut musculature. The great mane of hair and the shaggy coat which extends down to its flanks, however, is rendered in a more stylised fashion, composed of a series of lozenge-patterns overlaid one on top of the other.

6. Monumental red granite lion

*Egyptian XVIII Dynasty, reign of Amenhotep III, c. 1370 BCE,
from Soleb, Sudan (London, British Museum EA2)*



COMMENT: Dated to the reign of Amenhotep III (and subsequently adopted by a number of his successors including Tutankhamun, Horemheb and finally the Meroitic ruler Amanislo, who moved the sculpture south to his city of Gebel Barkal), this lion (one of a pair) originally stood in the Temple of Soleb in Nubia as a grandiose monument to a deified Amenhotep, ‘Lord of Nubia’, embodied in the image of the lion. Thus, an inscription on the lion’s breast reads: ‘The good god, the lion of rulers, a wild lion when he sees enemies [who dam]age his road’ (Kozloff and Bryan 1992: 210). The Pharaoh’s leonine prowess was also demonstrated in the act of hunting and killing wild lions. Amenhotep III was particularly skilled at the sport and proud of his achievements, as witnessed by a series of scarab-pronouncements he issued: ‘Amenhotep, ruler of Thebes, given life, (and) the Great Royal Wife, Tiy, who lives. Statement of lions which his majesty brought down with his own arrows from year 1 to year 10: fierce lions: 102’ (Breasted 1906 (ii): 347).

Amenhotep’s lion statue is an undoubted masterpiece of Egyptian sculpture. It is also a sublime response to natural observation because the artist rejects the traditional pose of the lion or sphinx which normally lies straight with its paws stretched out in front of its body; this lion is shown naturalistically, as in real life, relaxing on his side with crossed forepaws.

7. The lion and the mouse

*Egyptian animal fable, Leiden Demotic Papyrus I 384,
second century CE (after Lichtheim 1980: 158–9)*

As the lion was walking in search of man, there strayed into his paw a little mouse, small in size, tiny in shape. When he was about to crush him, the mouse said to him: ‘Do not [crush] me, my lord the lion! If you eat me you will not be sated. If you release me you will not hunger for me either. If you give me my breath (of life) as a gift, I shall give

you your own breath (of life) as a gift. If you spare me from your destruction, I shall make you escape from your misfortune.' The lion laughed at the mouse and said: 'What is it that you could [do] in fact?' Is there anyone on earth who would attack me?' But he swore an oath before him, saying: 'I shall make you escape from your misfortune on your bad day!' Now although the lion considered the words of the mouse as a joke, he thought, 'If I eat him I shall indeed not be sated,' and he released him.

Now it happened that there was a huntsman with a net who set traps and had dug a pit before the lion. The lion fell into the pit and fell into the hand of man. He was placed in the net, he was bound with dry (leather) straps, he was tied with raw straps. Now as he lay suffering on the mountain, in the seventh hour of the night, Fate wished to make his joke come true, because of the boastful words that the lion had spoken, and made the little mouse stand before the lion. He said to him: 'Do you recognize me? I am the little mouse to whom you gave his breath (of life) as a gift. I have come in order to repay you for it today, and to rescue you from your misfortune, since you are suffering. It is beautiful to do good to him who does it in turn.' Then the mouse set his mouth to the fetters of the lion. He cut the dry straps; he gnawed through all the raw straps with which he had been bound, and released the lion from his fetters. The mouse hid himself in his mane, and he went off with him to the mountain on that day.

COMMENT: The story of the lion and the mouse is the culmination of a longer Demotic tale known as *A Lion in Search of Man* (see HUMAN no. 6) and is clearly composed along the same lines as the better-known fable by Aesop (Perry 150). The motif of the weak helping the strong is a familiar one and has a long history in Egyptian animal fables which stretch back to the New Kingdom, although none of these have survived in full.

8. Predator of the flocks

Homer Iliad XVII.61–7

As when a mountain-reared lion, confident in his strength,
Seizes the finest cow from the grazing herd;
First he breaks her neck, holding her in his strong teeth,
Then he rends and devours the blood and entrails,
While around him the dogs and the herdsmen
Raise a shout from far off, and do not dare
To confront him, for green fear grips them too strongly.

Iliad XI.548–55

As when the countrymen and their dogs have driven off
A fierce lion from the fenced stockyard,
And do not let him tear the fat of the herd
Keeping watch the night through; and he, hungering for meat,
Prowls about but cannot reach it. For the javelins
Dart thickly at him from daring hands,
And burning brands, and these he fears despite his eagerness;
And at dawn he goes away, disappointed in his desire.

COMMENT: The lion is very present in the Homeric poems, especially the *Iliad* in which it is used twenty-eight times as a comparison for the heroes at war (Alden 2005: 335). Like all Homeric similes, however, the lion is an aspect of the contemporary world of the audience, in which it is a predator of cattle and other herd animals which people have difficulty deterring. The two similes above describe two different scenarios: in one the lion makes an attack and neither herdsmen nor dogs have the courage to drive it off (a comparison repeated several times: *Il.* XV.630–6; XVIII.573–86), while in the second the men and dogs successfully hold off a lion attacking at night with torches and javelins. There is general agreement among scholars that the simile reflects the reality of Ionian Greece in the seventh century BCE, where lions were common until the 1800s (Alden 2005: 336), though mainland Greeks did not share the experience of lion depredation. Alden argues that lions were also hunted for sport in Ionia in Homeric times, but the evidence for this is less convincing, relying on artistic evidence influenced by Near Eastern models. The similes offer a distinctively peasant perspective in which lions are the most fearsome of wild predators which find herds of cattle, sheep or goats irresistible, and there is often little that can be done to prevent their taking the animals.

9. Lions in Greece?

Herodotus Histories VII.124–6

Xerxes marched with his infantry forces from Acanthus along the inland road to join the fleet at Therme. His route was through Paeonia and Crestonia along the river Echeidoros, which rises in the Crestonian mountains and flows through Mygdonia to reach the sea at the marshes at the mouth of the Axios. On the march some lions set upon the Persian baggage–camels; the lions would come down by night from their usual territory and, leaving all other creatures unharmed, oxen and men alike, would kill only the camels. I cannot explain what compelled the lions to pass by the other animals and take only the camels, which they had never encountered before.

In these regions there are both many lions and wild bulls, which have huge horns that are imported into Greece. The lions inhabit a territory between the river Nestos which flows through Abdera and the Acheloos which flows through Acarnania; no lions are found either to the east of the Nestos in Europe, nor west of the Acheloos in the rest of the mainland – they live only in the territory in between.

Pausanias Description of Greece VI.5.4–5

Others have won equally famous victories in the *pancratation*, but Polydamas [of Scotussa] is distinguished by another feat as well as his prizes for *pancratation*. In the mountains of Thrace, bounded by the river Nestos which flows through the territory of the Abderites, are found many wild animals, and in particular lions; it was these lions which once set upon and mauled Xerxes' baggage camels. They often wander into the regions around Mount Olympus, one flank of which looks towards Macedonia and the other towards Thessaly and the river Peneios. Polydamas encountered a lion there on Mount Olympus, a large and powerful beast, and killed it with his bare hands.

COMMENT: A longstanding debate surrounds the survival of lions in Greece in classical times: they remained common in Asia Minor throughout the period, and literary references such of those of Herodotus (later copied by Aristotle, *HA* 579b 5–8) and Pausanias attest to their presence

in the mountains of northern Greece in the fifth century, but archaeological evidence for lions in southern Greece does not go beyond the Bronze Age. The waters are muddied further by an enigmatic bilingual tomb stele from Attica (*IG II² 8388*), dating to the Hellenistic period, which commemorates a Phoenician sailor who was apparently killed by a lion; that wild lions existed in Attica at this time is impossible to believe (Stager 2005). It has been strongly argued that lions, and lion-hunting, depicted in the lion hunt mosaic at Pella, were a part of Greek and Macedonian tradition (Cohen 2010: 68–71), but others see in the Macedonian interest in lions a combination of Eastern influence and wishful thinking: the lion hunt formed part of an ideology of rulership adopted from Persia and Assyria, magnified by the conquests of Alexander, and certainly the Hellenistic rulers adopted the idea of the lion as royal beast – King Lysimachus boasted of killing a lion single-handed (Plut. *Dem.* 27.3; Justin XV.3.7–9). It is fairly clear that the lion was not a creature which any Greek could expect to encounter in the normal run of things.

10. The noble lion

Ps-Aristotle, Physiognomonica 809b 14–36

Since this is the case, the lion seems of all creatures to be the most perfect example of the masculine qualities. It has a large mouth, a square face, not too bony, an upper jaw which does not overhang the lower, but is equal in size to it; a nose which is broad, not thin, bright, deep-set eyes, neither too round nor too narrow, of moderate size, large brows, a square forehead which is hollow in the centre, and which overhangs the brows and nose below like a cloud. Further up the forehead towards the nose it has tufts of hair which bend to the side. Its head is of medium size, its neck long and proportionately thick with a mane of tawny hairs, neither too bristling nor too smooth. At the collar bone the flesh is loosely-knit rather than dense, the shoulders are strong and the chest powerful. The body is broad, deep in the ribs and strong across the back, but the haunches and thighs are spare. The legs are stout and muscular, the gait powerful, and the whole of the body well-articulated and muscular, neither too tough nor too soft. The lion walks slowly with long strides and rolls his shoulders as he moves. These are the physical characteristics of the lion: in spirit he is generous and independent, noble and proud, and mild, just and affectionate towards his pride.

COMMENT: This treatise on the science of physiognomy has been preserved as the work of Aristotle, but is in fact likely to have been written c. 300 BCE (Vogt 1999). It draws on Aristotle's works, and attempts to systematise the science of relating appearance and character. Its description of the lion as the epitome of masculine virtue is not surprising, given the admiration which attached to it (though it was not in fact the 'king of the beasts': that was, to the ancient mind, the elephant), but the quality of the observation is remarkable, suggesting that the writer must have examined lions at close quarters. While tamed lions are occasionally referred to in classical Greece (e.g. Isocrates *Antidosis* 213) it is more likely that the writer drew his knowledge from the menageries of the Hellenistic kings: it is clearly the Asiatic lion which is described here. Many scientific claims about lions stemmed from a similar desire to establish its superiority over other animals: Aristotle rejects Herodotus' claim that the lioness breeds only once in her lifetime (III.108), her uterus being damaged by the cub, and observes rightly that lions produce cubs every year, but subsequently he claims that in Syria the lions bear only five litters of cubs, the first of five, the second of four, and so down to a final single cub, after which they become sterile (*GA*

750a 32–5, 760b 23). The stories seem to have a similar root in the idea that large predators are not prolific breeders as their prey tend to be.

11. The grateful lion

Pliny Natural History 8.56–8

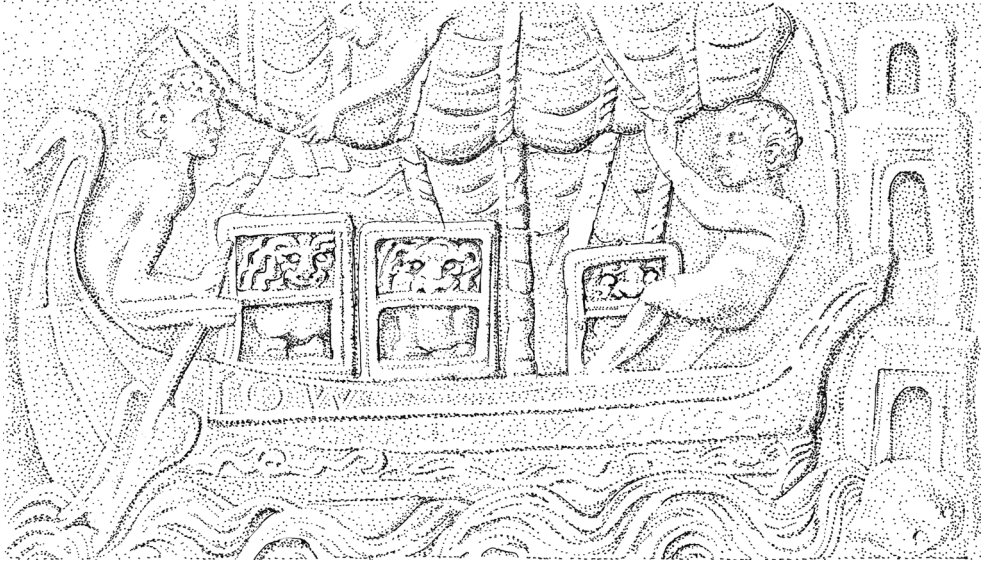
There are even some stories of lions behaving with mildness: Mentor the Syracusan encountered a lion in Syria and was struck with terror, but it rolled at his feet like a suppliant, and when he tried to run away it stood in his path at every turn and licked his footprints as though fawning on him. Eventually he noticed that one of its paws was swollen and injured, and by extracting the thorn which was lodged in it, he relived the animal's suffering. There is a picture of the event at Syracuse as witness to it.

In a similar way a Samian man named Elpis who had arrived in Africa by ship saw a lion near the shore which was snarling threateningly, and took refuge up a tree, calling on Father Liber for aid (for hopeless situations call most of all for prayers). But the lion, which had not stood in his way as he fled, though it could have done, lay down at the foot of the tree and begged for pity with the gaping mouth which had frightened Elpis. A bone had stuck in its teeth as it tore its food, and it was suffering from hunger as well as the pain of the obstruction itself; it looked up at him with a silent plea. . . . At length Elpis came down from his tree and extracted the bone, the lion offering its mouth and helping as much as possible. And the story goes that as long as the ship remained on the shore, the lion showed its gratitude by bringing him the prey it had caught. To commemorate the event Elpis founded a temple to Father Liber in Samos, which the Greeks call the temple of 'Dionysus of the Gaping Mouth' from the story.

COMMENT: Pliny's two stories of injured lions seeking help from humans are part of a long tradition of the grateful lion. The best-known version is undoubtedly Apion's famous tale of Androcles and the lion, in which the runaway slave Androcles is rewarded for his kindness to an injured lion when he meets the same beast in the arena (Aulus Gellius V.14; Ael. *NA* VII.48; see also Sen. *Ben.* II.19.1). The theme later became part of the Christian tradition, with St Paul's baptised lion (see below no. 13) and the lions of Saints Gerasius and Jerome. A common factor in all these tales is the protagonist's terror at meeting a lion alone and in the wild; without the intervention of fate a human could not expect to fight off a hungry lion. But such stories, attributing anthropomorphic qualities of mercy and gratitude to lions, were perhaps a way of accounting for their often reluctant behaviour in the arena: while impressive predators in the wild, there are several references in Roman sources to lions refusing to leave their cages or fighting only under duress, since the arena environment was a terrifying and unnatural one for them (Jennison 1937: 159–61).

12. Transport to Rome

*Sarcophagus relief, third century CE, Villa Medici, Rome
(drawing by Tessa Rickards)*



COMMENT: This relief, from a third-century Roman sarcophagus, shows three lions, all with fine manes, on board a ship to Rome, passing the lighthouse as it arrives at Portus. The hunting and transport of animals to Rome from the provinces (primarily North Africa, Syria and Mesopotamia) is extensively detailed in mosaics and reliefs: images such as the Great Hunt at Piazza Armerina and numerous North African mosaics show lions driven into nets or enclosures, then shut into cages for transport (Toynbee 2013: 25–30). Jennison (1937: 149) suggest that cages for long-distance travel were barred, like those shown here. While animals were fed en route, the survival rate among transported wild animals was undoubtedly low (MacKinnon 2006: 11–14), but the prices which could be levied were high enough to reward an importer in spite of this: the Price Edict of Diocletian gives maximum prices for lions and lionesses of 150 thousand and 125 thousand denarii respectively (34.1–4). Two price rates are given, for animals of first-class quality and second-class quality, suggesting that there was some variation in age, condition and ferocity.

Once unloaded at the port of Ostia (see above for an artist sketching a newly arrived lion) the animals were taken to *vivaria*, stockyards for exotic beasts. Although archaeological evidence is lacking for lions and similar large carnivores, our sources imply that many would have been housed here long-term, being trained or tamed and then going to the arena to perform and returning: Bomgardner's comparison to the European circus tradition is perhaps apposite (MacKinnon 2006: 14–15; Bomgardner 1992).

13. Lions and Christians

a) Acts of Paul and Thecla 7.2–9.10

When Paul and Thecla had arrived [in Antioch] a Syrian magistrate named Alexander saw Thecla and fell in love with her, and he [approached] Paul with money and gifts. But Paul said, 'I do not know the woman of whom you speak; she is not my kin.' Alexander, being a very powerful man, then embraced Thecla in the street, but she rejected his advances and sought for Paul. She raised an outcry, saying, 'Do not force a stranger against her will, do not force a servant of God! I am from an important family in Iconium, and was driven out from that city because I did not wish to marry Thamyris.' And seizing hold of Alexander she tore his cloak and snatched the wreath from his head, and made him appear ridiculous.

Alexander, partly still in love with her, and partly ashamed of what had happened, took her before the governor, and when she confessed what she had done, he sentenced her to be thrown to the beasts.

....

[First Thecla is taken to the *pompe*:] When the procession of the beasts took place, Thecla was put into a cage with a fierce lioness, and the lady Tryphaena accompanied her. But the lioness knelt before Thecla and licked her feet, and the crowd were amazed. The nature of her crime was written up as 'Sacrilege'. And the women with their children shouted out, saying, 'O god, there is no justice in the city'. And when the procession was over, Tryphaena took Thecla back home again.

...

[On the day of the games] Thecla was taken from Tryphaena's charge, stripped naked and given a cloth to wrap around her hips, and was brought into the arena, and the lions and bears were brought in to attack her. But the fierce lioness ran up to her and lay down at her feet, and the crowd of women gave a great shout. Then a bear ran up to attack her, but the lioness came to Thecla's defence and tore the bear to pieces. Next a lion which had been trained to be a man-eater and which belonged to Alexander ran up to her, but the lioness fought him and they killed each other. And the women were even more grieved, because the lioness which had been protecting Thecla was dead.

Then they let into the arena many other beasts, and Thecla, standing among them, stretched out her hands and prayed. When she finished her prayer she turned and saw a great trench filled with water, and said, 'Now is the time for me to be baptised,' and she threw herself into the water, saying 'In the name of Jesus Christ on this last day I baptise myself!' When they saw this the women and the whole of the crowd shouted out to her not to throw herself into the water, and the governor shed tears at the thought that such beauty should be eaten by the seals. Nevertheless Thecla threw herself into the water in the name of Jesus Christ, and the seals were struck by fire and lightning and floated dead on the water. And around Thecla there was a cloud of fire, so that the beasts could not touch her, and nor could the spectators see her naked.

Other more fearsome beasts were put into the arena, and the women sent up a wail, and they threw perfumes – silphium, spikenard, cassia and cardamom – a great mass of perfumes. And all of the beasts lay stifled as though asleep and did not touch Thecla.

b) Pseudo-Matthew 35–6 (after Elliott 2006: 167)

There is a road going out of Jericho and leading to the river Jordan, to the place where the children of Israel crossed; and there the Ark of the Covenant is said to have rested. And Jesus was eight years old, and he went out of Jericho and went towards the Jordan. And there was beside the road, near the bank of the Jordan, a cave where a lioness was nursing her whelps; and no one was safe to walk that way. Jesus, coming from Jericho, and knowing that in that cave the lioness had brought forth her young, went into it in the sight of all. And when the lions saw Jesus, they ran to meet him and worshipped him. And Jesus was sitting in the cavern and the lion's whelps ran round his feet, fawning and playing with him. And the older lions, with their heads bowed, stood at a distance and worshipped him and fawned upon him with their tails. Then the people who were standing afar off and who did not see Jesus, said, 'Unless he or his parents had committed grievous sins, he would not of his own accord have exposed himself to the lions.' And when the people were reflecting within themselves and were overcome with great sorrow, behold, suddenly in the sight of the people Jesus came out of the cave and the lions went before him, and the lion's whelps played with each other before his feet. And the parents of Jesus stood afar off with their heads bowed and they watched; likewise also the people stood at a distance on account of the lions, for they did not dare to come close to them. Then Jesus began to say to the people, 'How much better are the beasts than you, seeing that they recognize their Lord and glorify him; while you men, who have been made in the image and likeness of God, do not know him! Beasts know me and are tame; men see me and do not acknowledge me.' After these things Jesus crossed the Jordan in the sight of them all with the lions; and the water of the Jordan was divided on the right hand and on the left. Then he said to the lions so that all could hear, 'Go in peace and hurt no one; neither let man injure you, until you return to the place where you have come from.' And they, bidding him farewell, not only with their voices but with their gestures, went to their own place. But Jesus returned to his mother.

COMMENT: Christians thrown to the lions in the arena is one of the most enduring images of ancient Rome today, and many early Christian texts contain stories of martyrdom by lion. The reality, however, was more complex: the practice of condemning criminals to death by wild animals as a public spectacle (*damnatio ad bestias*) was of long standing in Roman society, and many arena scenes on North African mosaics include images of bound victims savaged by leopards (see LEOPARD no. 4); Mart. *Spect.* 7 describes a criminal killed by a bear. Christians, at times of persecution, were sentenced to the same fate, and for the early Church the lion became an important symbol of oppression, linking as it did with the Old Testament tale of Daniel in the lions' den (see above). But the lion is in fact not very common in scenes of *damnatio ad bestias* – bears, leopards and bulls are more usual – partly because lions were more difficult to acquire, and partly because they are less easily goaded to indiscriminate killing. In many cases, as in the story of Thecla above, the lions do not actually kill their victim, but become miraculously tame, or even defend the martyr from other beasts; Thecla herself is eventually saved and set free. St Paul is said to have baptised a lion which he encountered in the mountains on his travels, and then to have met the same beast in the arena, where it fell down and licked his feet, plainly a variant on the Androcles story (Adamik 1996).

The story of the young Jesus and the lion contained in *Pseudo-Matthew*, better known as *The Infancy Gospel of Matthew*, probably draws on the early Christian stories of martyrdom to lions by making these particular beasts into tame celebrants of the living Christ; in fact they are

among the first of any creature to recognise his divinity. The story is in part told as the fulfilment of Isaiah's prophecy of universal peace (65.25) and, for his part, Jesus shows his kindness to the lions by allowing them to cross the river Jordan into freedom rather than be captured and killed for dwelling too close to human habitation. In fact, *Pseudo-Matthew* shows a deep sympathy for animals; it is in this text, for instance, that stories of the ox and ass in the stable at Bethlehem first emerge in the Christian tradition (Hobgood-Oster 2008).

Bibliography

- T. Adamik, 'The baptized lion in the *Acts of Paul*', in J.N. Bremmer (ed.), *The Apocryphal Acts of Paul and Thecla* (Kampen 1996), 60–74.
- M. Alden, 'Lions in paradise: lion similes in the *Iliad* and the lion cubs of *Il.* 18.318–22', *CQ* 55 (2005), 335–42.
- T.T. Allsen, *The Royal Hunt in Eurasian History* (Philadelphia 2006).
- D.L. Bomgardner, 'The trade in wild beasts for Roman spectacles: a green perspective', *Anthropozoologica* 16 (1992), 161–6.
- J.H. Breasted, *Ancient Records of Egypt* (4 vols) (Chicago 1906).
- M. Cartmill, 'Hunting and humanity in Western thought', *Social Research* 62.3 (2005), 773–86.
- A. Cohen, *Art in the Era of Alexander the Great* (Cambridge 2010).
- K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
- J.K. Elliott, *A Synopsis of the Apocryphal Nativity and Infancy Narratives* (Leiden 2006).
- B.A. Foreman, *Animal Metaphors and the People of Israel in the Book of Jeremiah* (Göttingen 2011).
- M.B. Garrison, 'The heroic encounter in the visual arts of Ancient Iran and Iraq ca. 1000–500 BC', in D.B. Counts and B. Arnold (eds), *The Master of Animals in Old World Iconography* (Budapest 2010), 151–61.
- L. Hobgood-Oster, *Holy Dogs and Asses: animals in the Christian tradition* (Champaign 2008).
- T.L. Holm, *Of Courtiers and Kings. The Biblical Daniel Narratives and Ancient Story-Collections* (Winona Lake 2013).
- P.N. Humphries and E. Kahrom, *The Lion and the Gazelle. The Mammals and Birds of Iran* (Bath 1995).
- D. Jackson, *Lion* (London 2010).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
- A.P. Kozloff and B.M. Bryan, *Egypt's Dazzling Sun: Amenhotep III* (Cleveland 1992).
- M. Lichtheim, *Ancient Egyptian Literature: Volume III. The Late Period* (Berkeley 1980).
- L. Llewellyn-Jones, *King and Court in Ancient Persia 559–331 BCE* (Edinburgh 2013).
- D. Luckenbill, *Ancient Records of Assyria and Babylon* (London 1989).
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Museion* 6 (2006), 1–25.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- C. Pavolini, *La vita quotidiana a Ostia* (Rome 1986).
- N. Postgate, *Bronze Age Bureaucracy. Writing and the Practice of Governance in Assyria* (Cambridge 2014).
- J. Reade, *Assyrian Sculpture* (London 1988).
- M.C. Root, 'The lioness of Elam: politics and dynastic fecundity at Persepolis', in W. Henkelman and A. Kuhrt (eds), *A Persian Perspective. Essays in Memory of Heleen Sancisi-Weerdenburg* (Achaemenid History XIII) (Leiden 2003), 9–32.
- J.M. Russell, *The Writing on the Wall: studies in the architectural context of Late Assyrian palace inscriptions* (Winona Lake 1999).
- R. Sallares, *The Ecology of the Ancient Greek World* (Ithaca, NY 1991).
- G.J. Shaw, *The Pharaoh. Life at Court and on Campaign* (London 2012).
- J.M.S. Stager, '"Let no one wonder at this image": a Phoenician funerary stele in Athens', *Hesperia* 74 (2005), 427–49.
- B.A. Strawn, *What is Stronger than a Lion? Leonine Imagery and Metaphor in the Hebrew Bible and the Near East* (Göttingen 2005).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- K. van der Toorn, 'In the lions' den: the Babylonian background of a Biblical motif', *Catholic Biblical Quarterly* 60 (1998), 626–40.

S.Vogt, *Aristotles: Physiognomonica* (Darmstadt 1999).

C.E. Watanabe, *Animal Symbolism in Mesopotamia. A Contextual Approach* (Vienna 2002).

R.H. Wilson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003).

LEOPARD

The leopard, *Panthera pardus*, became extinct from Europe in prehistoric times, but in antiquity large populations still existed throughout Africa and the Near East, including several localised subspecies such as the Persian leopard (*P. saxicolor*), Anatolian leopard (*P. tulliana*) and Arabian leopard (*P. nimr*). Unlike lions, leopards are solitary, and have adapted to a very wide range of habitats, including mountain and desert as well as forest. Their primary prey were (as today) deer and rodents, but inevitably they came into contact with humans, sometimes preying on domestic flocks and even attacking people. Ancient attitudes towards them were thus naturally hostile, and as lone opportunistic hunters they were not credited with the noble or royal characteristics attribute to lions. Nevertheless, the leopard was an important animal in some early Near Eastern cultures, especially in Anatolia where the great mother-goddess had as her companion both lions and leopards. At Neolithic Çatal Hoyuk, plaster wall reliefs of painted leopards attest to their cultic importance and, several millennia later, at the Hittite ritual site of Yazilikaya, a goddess is represented standing on the back of a leopard (Gunter 2002).

Leopards show us one of the starkest distinctions between Greek and Roman attitudes: in Greece, while references to leopards begin with Homer (*Il.* XVII.20, XXI.573–9), they were not present except as imported skins, and remained decorative exotics in art. In Rome, however, the story of the leopard is a sorry one: it became a sought-after arena beast, and from 186 BCE onwards hundreds at a time were imported simply to be killed in public shows (Livy 39.22, 44.18; Pliny *NH* VIII.64, X.202). No scientific interest in or appreciation of the leopard seems to leaven the Roman attitude – they were seen as the epitome of the ravening wild beast, lacking the nobility of the lion. The little that Roman writers say about leopards is often mistaken or fanciful, such as the idea that they lured their prey by emitting a sweet fragrance (Pliny *NH* VIII.62; Ael. *NAV.*40), and the attitude is all the more odd because they were so frequently seen at Rome.

Several Roman mosaics depict the trapping of leopards: the mosaic of the Great Hunt at Piazza Armerina shows a leopard surrounded by a wall of men carrying shields (Toynbee 2013: 40), and most such hunting was carried out by professional hunters (see Oppian *Cyn.* IV.212–29, 320–53). At the other end of the supply chain Pliny relates the tale of the sculptor Pasiteles, who was at the docks sketching a newly arrived lion in a cage when he was attacked by a leopard which had broken free from a similar cage, and barely escaped with his life (*NH* XXXVI.40). The demand for leopards is well illustrated by correspondence between Cicero and Caelius in which Caelius nags Cicero during his governorship in Cilicia to send him *pantheras* for his games (*Ad Fam.* VIII.2, 3, 6, 8 and 9, II.11), and it seems that by the later empire the pressure from hunting caused them to become locally scarce (MacKinnon 2006: 153–4). Almost all leopards brought to Italy or the Roman provinces met a violent end in the arena, but they are occasionally mentioned as high-status pets, such as those belonging to the emperor Elagabalus (see PETS no. 9).

1. Leopard skin

Line drawing of a painted wall from the tomb of Roy at Thebes, Egypt, XIX Dynasty, reign of Ramses II



COMMENT: This fragment of a tomb wall-painting shows the tomb owner's eldest son officiating as a priest in the family cult of the dead, wearing a distinctive leopard skin wrap as part of his costume. Leopard skins were popular forms of tribute, gift and trade from the south of Egypt since the pelts were in demand for ritual purposes. Priests often wore spotted feline pelts as part of their official garb (the spots, it is suggested, being linked to the stars of a night sky) and individuals undertaking funerary rites for family members can also be depicted in leopardskin wraps (Goldwasser 2002: 59–61). Even fake skins made of dyed linen have been found in tomb contexts. It is probable that, as still occurs in traditional African societies, the wearing of the animal skin imbued a human with the strengths and attributes of the beast, and thus it is likely that leopardskins had apotropaic qualities (Castel 2002).

2. Biblical leopards

a) Hebrew bible, Jeremiah 5.6, 13.23

Therefore a lion from the forest will attack them, a wolf from the desert will ravage them, a leopard will lie in wait near their towns to tear to pieces any who venture out, for their rebellion is great and their backslidings many. . .

Can an Ethiopian change his skin or a leopard its spots? Neither can you do good who are accustomed to doing evil.

b) Hosea 13.7

So I will be like a lion to them, like a leopard I will lurk by the path.

c) Song of Songs 4.8

Come with me from Lebanon, my bride, come with me from Lebanon. Descend from the crest of Amana, from the top of Senir, the summit of Hermon, from the lions' dens and the mountain haunts of leopards.

COMMENT: The Hebrew word *nāmēr* no doubt means 'leopard', but by extension could also be used for 'cheetah' depending on context (see Habakkuk 1.8). Biblical references to the leopard are scarce, suggesting that it was less well known, or at least less frequently encountered, than the lion, although the leopard was native to the Levant. The image invoked of the animal by biblical authors is one of ferocity, stealth and terror. When the prophet Isaiah wanted to create an image of universal peace he therefore employed the unlikely image of a leopard lying down with a kid (Isaiah 11.6).

3. The leopard in Greek art

Corinthian dinos, Metropolitan Museum of Art 1997.36, c. 630–615 BCE, attr. Polyteleia Painter (The Bothmer Purchase Fund and Louis V. Bell Fund, 1997). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



Corinthian alabastron, Getty Museum 85.AE.51, c. 640–625 BCE, attr. Painter of Palermo 489 (Digital image courtesy of the Getty's Open Content Program)



COMMENT: The leopard enters the repertoire of Greek art in the seventh century, under the influence of the Orientalising movement: the same was true of the lion, but the leopard retained its character as a clearly Eastern and unusual animal (Fermum 1977). Confusingly, art historians usually refer to it as a 'panther' in this context. The early Corinthian dinos (p. 340) carries two registers of animal frieze, leopards and sphinxes above and sphinx, lion and goat below, and clearly shows the contrast between the leopard and the lion: the latter is stockier, maned and shown in profile, whereas the leopards are lighter in build and more sinuous, often spotted and facing frontally to the viewer (Amyx 1988: 663–5). The frontal face marks the leopard out as a mysterious or otherworldly creature, like the sphinx and sirens which accompany it; in some cases, such as the alabastron (above), the leopard becomes a double-bodied beast, sharing a single forward-facing head, and the leopard-head later became a motif of its own, found on vase handles and fountain spouts. In later Greek and Roman art leopards most usually appear as an attribute of Dionysus, emphasising his Eastern origin, and in scenes of Orpheus charming the animal kingdom (Toynbee 2013: 84–6, 288–94). Through the latter in particular, knowledge of the leopard spread to the ends of the Roman empire, attested among other examples by the fine spotted animal in the Orphic mosaic at Woodchester in Gloucestershire (Toynbee 2013: colour pl.2 and cover).

4. A leopard kills a prisoner in the arena

*Detail, Roman mosaic from Domus Sollertiana, El Djem
(El Djem Archaeological Museum), late second century CE
(photograph: DeAgostini Picture Library/Scala, Florence)*

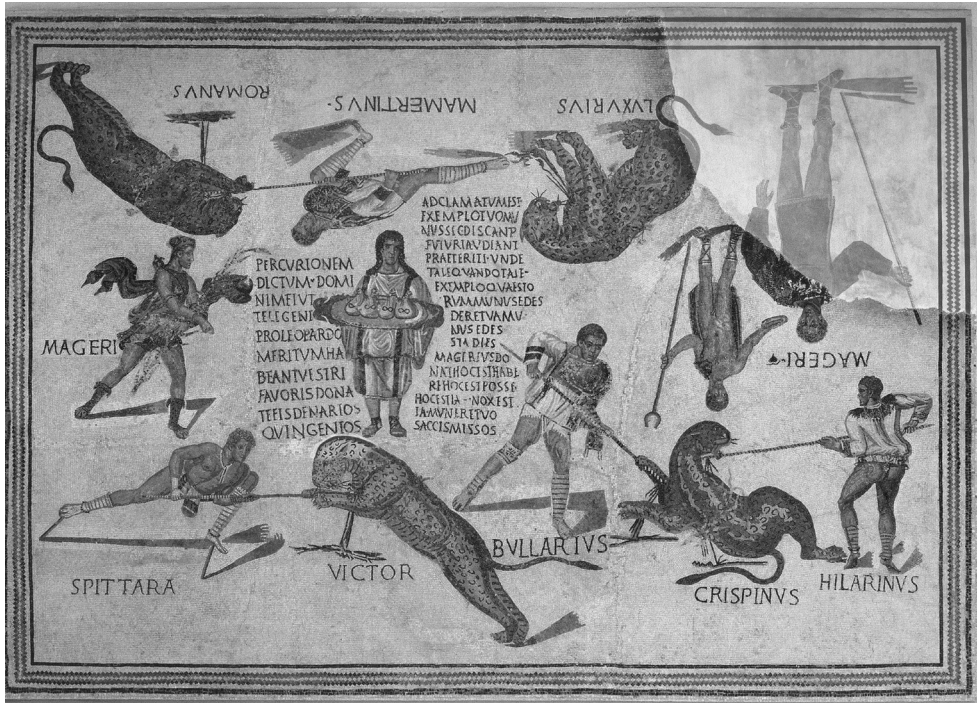


COMMENT: This grisly picture of a leopard attacking a bound man forms part of a Roman mosaic from the dining room of a house at El Djem in Tunisia, which depicts prisoners of war condemned to death by wild animals (*damnatio ad bestias*) in the arena. The condemned men, with their arms bound, are brought by attendants into the arena where leopards and bears prowl; on a mosaic of similar period from Zliten they are transported tied to a stake in a small cart (Dunbabin 1978: fig. 47). *Damnatio ad bestias* was a common form of execution under the Roman empire, and while many animals were used as agents (see LION no. 12), the leopard attracted the most bloody images, undoubtedly because of its reputation as a ravenous predator. In fact big cats were one of the (comparatively) better options, as they tend to kill with a fatal bite, as opposed to animals such as bears or bulls which maul their victims (Gilhus 2006: 191). The gruesome nature of the image, however, goes some way to explaining Roman hostility towards leopards.

As well as being pitted against humans, leopards often hunted other animals too: a leopard bringing down a deer or other herbivore is a common theme, while an arena mosaic in Paphos depicts a leopard that has decapitated a wild ass and carries off its head (Kondoleon 1994: 298 and fig. 191).

5. Named leopards

*Roman mosaic, from Smirat (Sousse Archaeological Museum),
third century CE (Photograph Scala, Florence)*



COMMENT: The Magerius mosaic was found at Smirat near Sousse in Tunisia, and commemorates a *venatio* financed by one Magerius. Probably from a wealthy villa, the image shows four *venatores* killing four leopards, with a central inscription celebrating Magerius' generosity. Very bloody mosaics of leopards killed in the arena are not uncommon (e.g. that from Torre Nuova, Kalof 2011: fig. 4.9), but strikingly here all four leopards are named: Crispinus, Victor, Romanus and Luxurius. A leopard named Andromache also appears on the Cos arena mosaic (Toynbee 1948: 36), and this raises an obvious question: why name and individualise a leopard which is in the arena simply to be killed? Performing leopards are not attested, but Bomgardner notes that if a leopard is to give a good show in a fight, it was probably trained (2009: 168). A name seems to suggest that leopards were not brought in *en masse* to be slaughtered, but rather took part in featured fights: like the *venatores*, the animals might be regular performers in the arena. Elsewhere he (141) suggests that names might be used for betting by the audience. We also need not assume that the image, of four 'star' leopards being speared, represents a regular occurrence; in a period when

animals for the arena became harder to procure, using a leopard for several successive bouts and advertising its prowess would be a sound economic tactic. A similar *venatio* scene with leopards from Lepcis, in which four leopards are speared by six huntsmen (Toynbee 2013: fig 27), three of the leopards named as Fulgentius, Rapidus and Victor, seems to illustrate the idea: unlike the Magerius mosaic, in two of the fights the leopards clearly have the upper hand.

Bibliography

- D.A. Amyx, *Corinthian Vase-Painting of the Archaic Period* (Berkeley 1988).
- D. Arnold, 'An Egyptian bestiary', *The Metropolitan Museum of Art Bulletin* 52.4 (1995), 1–64.
- D.L. Bomgardner, 'The Magerius mosaic revisited', in T. Wilmott (ed.), *Roman Amphitheatres and Spectacula: a 21st-century perspective. Papers from an international conference held at Chester, 16th–18th February 2007* (Oxford 2009).
- D.L. Bomgardner, *The Story of the Roman Amphitheatre* (London 2000).
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
- E. Castel, 'Panthers, leopards and cheetahs. Notes on identification', *Trabajos de Egiptología* 1 (2002), 17–28.
- K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
- D. Engels, *Classical Cats: the rise and fall of the sacred cat* (London and New York 1999).
- A. Fermum, *Der Panther in der frühen griechischen Vasenmalerei: seine Herkunft und Entwicklung* (Freiburg 1977).
- I.S. Gillhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
- O. Goldwasser, *Prophets, Lovers and Giraffes: wor(l)d classification in ancient Egypt* (Wiesbaden 2002).
- A.C. Gunter, 'Animals in Anatolian art', in B.-J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 79–96.
- L. Kalof (ed.), *A Cultural History of Animals in Antiquity* (Oxford 2011).
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–450.
- K.F. Kittell, *Animals in the Ancient World from A to Z* (London 2014).
- C. Kondoleon, *Domestic and Divine: Roman mosaics in the House of Dionysus* (Ithaca, NY 1994).
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Mouseion* 6 (2006), 137–61.
- D. Morris, *Leopard* (London 2014).
- J.M.C. Toynbee, 'Beasts and their names in the Roman empire', *PBSR* 16 (1948) 24–37.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (rev. ed. Barnsley 2013).

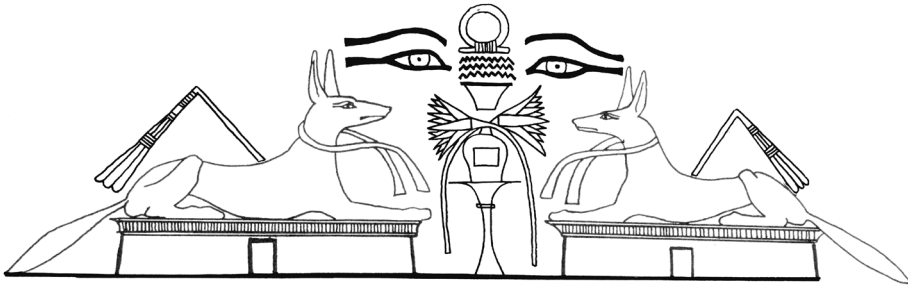
JACKAL

Jackals, slender-built close relatives of the dog, are opportunistic pack scavengers and night hunters of insects and small mammals, playing an important part in the ecological system. The golden jackal (*Canis aureus*) was the best known ancient species of jackal, occupying a vast swathe of territory from north Africa to India, and frequently coming into contact with humans because of its preference for areas with plentiful food, such as refuse dumps near human habitation, or cemeteries. One of the characteristics most associated with the jackal is its high-pitched nocturnal howling. In Egypt the jackal was one of the most culturally significant animals because of its close association with the cult of the dead, whereas in the Near East jackals were regarded as scavengers and shared an equal place of contempt with the dog. The place of the jackal in Greek and Roman society is more limited, but complex. It was recognised as a form of wolf, and as a mountain predator; Aristotle comments that jackals are harmless to humans but hostile to dogs, and are notable for the variation of their fur, which changes colour and grows thicker in the winter (*HA* 630a

9–17). Pliny reproduces Aristotle's description (NHVIII.123), but by Roman times the jackal was firmly categorised as a foreign animal, and was often confused either with the painted hunting dog (Arr. *Ind.* VIII.15.3; Oppian *Cyn.* III.336–9), or the hyena (Meyboom 1995: Appendix 2). They appeared neither in Italian art nor in the arena, though some have been identified in North African mosaics of the Roman Empire (Toynbee 2013: 26, 287). Several fables of Indian origin involving jackals are found in the Aesopic corpus, with the jackal adapted into the fox.

1. The jackal Anubis

Tomb of Sennedjem, Thebes, New Kingdom, XIX Dynasty



COMMENT: As an animal which occupied the liminal space between the wild and the urban, the golden jackal (Egyptian, *wenesh*, *z3b*; for a discussion of the terms see Vernus and Yoyotte 2005: 115–23) became the focus of stories and myths centred on death and resurrection. In Egypt the jackal-headed god Anubis was the deity responsible for the preservation of the dead and he supervised the weighing of the deceased's heart. Jackals were thought to populate the underworld – in the Book of Gates twelve jackal-headed deities guard the rectangular Sea of Life. Khentamenti, First of the Westerners (i.e., the deceased), was the jackal-headed god of the necropolis of Abydos and during the late First Intermediate Period he came to be identified with Osiris, Lord of the West (see Osborn and Osbornova 1998: 75–9; Vernus and Yoyotte 2005: 123–9). In New Kingdom tombs, a brick decorated with a jackal motif was inserted in the eastern wall of the burial chamber and from the Middle Kingdom on, reclining images of jackals are not unfamiliar (the best known is the elegant wooden image of Anubis found in the tomb of Tutankhamun, where he acts as a divine watchdog). This painted example rendered as opposed images is an accurate representation of the living animal: in the wild a golden jackal's large fox-like ears (here schematically, but stylishly rendered) and its general look is one of alertness and watchfulness.

2. Howling jackals: symbols of desolation

Hebrew bible, Isaiah 13

Babylon, the jewel of kingdoms,
the pride and glory of the Babylonians,
will be overthrown by God
like Sodom and Gomorrah.

She will never be inhabited
or lived in through all generations;
there no nomads will pitch their tents,
there no shepherds will rest their flocks.
But desert creatures will lie there,
jackals will fill her houses;
there the owls will dwell,
and there the wild goats will leap about.
Hyenas will inhabit her strongholds,
jackals her luxurious palaces.

Hebrew bible, Isaiah 34:11–14

God will stretch out over Edom
the measuring line of chaos
and the plumb line of desolation.
Her nobles will have nothing there to be called a kingdom,
all her princes will vanish away.
Thorns will overrun her citadels,
nettles and brambles her strongholds.
She will become a haunt for jackals,
a home for owls.
Desert creatures will meet with hyenas,
and wild goats will bleat to each other;
there the night creatures will also lie down
and find for themselves places of rest.

Hebrew bible, Micah 1:6, 8–9

Therefore I will make Samaria a heap of rubble,
a place for planting vineyards. . .
Because of this I will weep and wail;
I will go about barefoot and naked.
I will howl like a jackal
and moan like an owl.
For Samaria's plague is incurable;
it has spread to Judah.
It has reached the very gate of my people,
even to Jerusalem itself.

COMMENT: The Hebrew word for 'jackal' (*lyim*) means 'howler' and the image of the howling jackal (as well as that of the wolf, the barking hyena and the hooting owl) is an effective symbol commonly used by the Hebrew prophets to signify the notion of urban desolation – the result of warfare or plague – the consequences of Yahweh's wrath (Jeremiah 10:22, 49:33). Isaiah predicts that when the city of Babylon falls to the anger of God, even this great urban metropolis will become the haunt of jackals and other desert scavengers. Bible references commonly link the jackal to nocturnal activity and bleak ruins, but as social pack animals, jackals communicate through a wide repertoire of calls – barks, yelps and howls. Howling can be infectious, with

packs starting up one after another at dusk until an area echoes to their wailing (Bright 2006). An alternative Hebrew word for 'jackal' is *tan*, 'lengthy', which probably refers to its long, slender silhouette, although it is possible that the word is associated with its echoing, haunting call. Appropriately, Micah uses the jackal's mournful howl as a symbol of pain, and Job makes the intensity of his suffering clear by calling himself 'a brother of jackals' (Job 30:29).

3. Jackals in the mountains

Homer Iliad XI.473–86

They found there godlike Odysseus, and around him
The Trojans pressed, like tawny jackals in the mountains
Around a horned stag which has been injured, which a hunter has struck
With an arrow from the string; and the stag flees
On fleet foot, while its blood stays warm and its limbs bear it;
But when the pain of the swift arrow overcomes it,
The flesh-eating jackals devour it in the mountains
In a shadowed grove. But the god brings a ravening lion among them,
And the jackals scatter, and the lion eats their kill.
So around much-devising Odysseus the Trojans
Pressed, many and strong, and the hero
Wielding his spear ward off the day of death.
Ajax came close to him, bearing his shield like a tower,
And stood alongside him, and the Trojans scattered in all directions.

COMMENT: The *Iliad* mentions the jackal twice, here and at XIII.102–4, also as a predator of deer. This simile draws an accurate picture of the jackal's scavenging habits, and perhaps accounts for later writers' statements that the jackal is a particular enemy to the lion (Ar. *HA* 610a 14; Plin. *NH* VIII.74). The jackal is here understood as an animal native to Greece, but evidence for this is difficult to find: excavations of early Greek sites at Nichoria and Lerna in the Peloponnese found no archaeological evidence for jackals, although contemporary populations were identified in the area of Nichoria (Sloan and Duncan 1978: 69). Post-Homeric references, however, tend to place the jackal outside Greece: Herodotus describes them in North Africa (IV.192), and once the Romans had become familiar with the Egyptian Anubis they envisaged the jackal as entirely non-European.

Bibliography

- M. Bright, *Beasts of the Field* (London 2006).
P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
R.E. Sloan and M.A. Duncan, 'Zooarchaeology of Nichoria', in G.R. Rapp and S.E. Aschenbrenner (eds), *Excavations at Nichoria in Southwest Greece I* (1978), 60–76.
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
J.A. Tyldesley, *Egyptian Games and Sports* (Colchester 2007).
P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).

HYENA

The striped, spotted and brown hyena constitute a distinct family of the order of *carnivora*; hyenas are nocturnal animals, powerful but somewhat cowardly, feeding on carrion or snatching other animals' kills, and even grave-robbing – a habit which has won them the abhorrence of the natives of the countries that they inhabit. With a stout head, short snout and ears, and powerful jaws with strong teeth, useful for crushing bones to get at the nutrients contained inside, the hyena can be a formidable enemy to the wild dogs and jackals which compete for its carrion-finds.

Egyptian and Near Eastern texts and images about the hyena are direct and realistic (see for instance an Achaemenid Persian seal showing a seated hyena; Boardman 1970: pl. 1069) while almost every description of the hyena from Greco-Roman antiquity presents it as a magical animal with strange powers. The striped hyena, as a widespread inhabitant of North Africa, was known to the Greeks from the earliest times, appearing in Herodotus' list of creatures found in the country of the nomads (IV.192) with the name *huaina* (literally, pig-like creature, from its bristly mane). Scientific writers distinguish this species from the Ethiopian *corocotta*(s) or spotted hyena, which was said to be larger and more fearsome, and Pliny also offers a description of a creature called the *leucrocotta* (lion-like hyena) which is bigger again and has 'a mouth which opens right back to the ears' (NHVIII.72). But in regular usage the names tended to be applied indiscriminately, and in later Latin *belbus* was also used (SHA *Gord. III* 33.1.2). Hyenas were not often seen at Rome, and some confusion exists over when they were first imported: Dio (LXXVII.1.4) says that the *corocotta* was first brought to Rome in 202 CE for the games of Septimius Severus, but *corocottas* are previously recorded at the Secular Games of Antoninus Pius in 148 CE (SHA *Ant. Pius* 10.9), and Meyboom (1995: 117) speculates that the creature called *chama* presented at the games of Pompey in 55 BCE (Plin. NHVIII.70) may have been a spotted hyena. Dio says further that the *corocotta* is an Indian animal, although the creature that he describes seems to be the familiar striped hyena. The confusion probably came about because hyenas were very unusual as arena beasts: the Romans appreciated fierce and aggressive animals, and hyenas are notoriously cowardly. They thus would have been sufficiently unusual to have made an impression on each generation which saw them, whether they were sent from Ethiopia or India (Jennison 2005: 84–5); certainly they are all but absent from Roman art and coins (Meyboom 1995: 231 n.38; Toynbee 2013: 25).

1. Hyenas eat anything

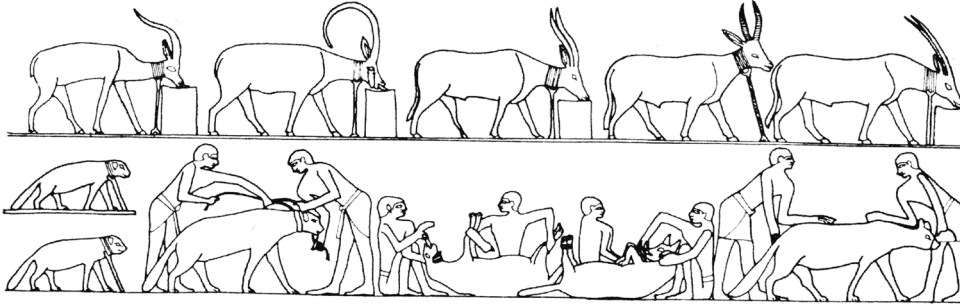
Sumerian proverb (Alster 1997 (1): 168)

Like a hyena, you will eat
it as long as it does <not>
stink.

COMMENT: Striped hyenas are strictly nocturnal, hiding during the day in caves and rock crevices (such as the 'Valley of the Hyenas' mentioned in the Hebrew bible: 1 Samuel 13:18 and Nehemiah 11:34) but emerging at night to look for carrion which is often dragged off to denning areas where bone-piles accumulate. Hyenas are known to enter villages to look for scraps of food, and in this way they can come into close contact with humans, and might even attack them (they will also dig up human graves). However, by and large hyenas only attack living prey when very hungry and sometimes they will attack and eat their own kind. The Sumerian proverb accurately portrays the hyena's indiscriminate eating habits, and reveals that, much like the DOG and the JACKAL, the hyena was despised in Near Eastern cultures.

2. Egyptian foie gras?

Line-drawing of an Old Kingdom wall relief, tomb of Mereruka, VI Dynasty c. 2345–2333 BCE



COMMENT: The Old Kingdom tombs of Mereruka (shown here) and Kagemni at Saqqara contain very enigmatic scenes of hyena handling and feeding (Darby, Ghalioungui and Grivetti 1977 (I): 252–3; Houlihan 1996: 68). The process of feeding begins with the animals waiting their turn to be fed, tethered by a collar and a lead. The feeding then takes place with the hyena held on its back, its feet and legs tightly secured with ropes, while food is forced into its mouth in a process of stuffing perhaps more familiar to the modern western world with geese and ducks. Benches beside the hyenas hold the dressed carcasses of ducks or geese, suggesting that only good, fresh flesh was used for force-feeding. Finally, the replete hyenas (with rounded stomachs) are led away from the feeding area by their human attendants.

Did the Egyptians try to domesticate striped hyenas? If so, then why was force-feeding necessary? This species (and the spotted variety of South Africa), after all, was known for its gluttony (Evans and Swinton 2012; Vernus and Yoyotte 2005: 146–50). Perhaps hyena meat was intended as an offering to the gods or for the dead, although there is now good evidence to show that their meat was eaten and enjoyed by the living. It appears that hyenas were captured (or perhaps bred in captivity) and force-fed for the human table: at Amarna, the short-lived capital of Akhenaten, hyena bones have been found in the Workmen's Village which display careful butchery marks, which strongly implies that the meat was part of the human diet there (Legge 2009, *contra* Ikram 1995: 22–3). In Africa the hyena was eaten into recent times and its meat is described as having a repulsive smell but being sweet to taste (on human–hyena relationships in contemporary Africa see Brottman 2012).

3. The strange habits of the hyena

Pliny Natural History VIII.105–7

Most people believe that the hyena is bisexual, in one year being male and in the other female, and they believe that the female reproduces asexually, though Aristotle says that none of this is true. Its neck and mane are fused with its spine, and cannot bend unless it turns its whole body around. Many amazing stories are told about it, and particularly the following: the hyena goes among herdsmen's homesteads imitating human speech, and when it has learned a man's name it calls him to lure him outside, and then kills

him; in the same way it imitates the sound of a man vomiting in order to attract dogs, which it then attacks. It is the only animal which digs up graves in search of corpses; a female hyena is rarely caught; its eyes have a thousand variations and changes of colour; it is also said that its shadow falling upon dogs renders them mute, and that any animal which it circles three times is rooted to the spot by some kind of magical power.

The cross-breeding of the hyena with the Ethiopian lion produces the *corocotta*, which likewise mimics the voices of men and their herd animals. It has an unbroken ridge of bone in each of its jaws, forming one continuous tooth without gums, and to prevent them being blunted as they clash together they are covered by a kind of case.

Aelian On the Nature of Animals VI.14

The hyena, according to Aristotle, has in its left paw the power to send creatures to sleep, and can instill torpor simply with a touch. They are often found around stockyards, and whenever the hyena finds a creature sleeping it approaches stealthily and presses its sleep-inducing paw (so to speak) against the creature's nose, and it is strangled and overcome. The hyena then digs out the ground under the animal's head until it is deep enough for the head to roll back and leave the throat bare and exposed. Then it leaps on the animal and throttle it, and takes it back to its lair. As for dogs, it attacks them in the following manner: at full moon the hyena stands with the light behind it and casts its own shadow onto the dogs, which immediately silences them; then having ensorcelled them into silence, as witches do, it carries them off to treat as it wills.

COMMENT: Pliny's description of the hyena encapsulates all the ways in which it was considered to be uncanny. Elements of what he says are accurate – the hyena does have limited mobility in its neck and spine, and he notes at VIII.72 its ability to crush the largest bones – but in other ways the account draws on folklore. As indicated here, Aristotle had tried hard to correct the impression that the hyena has both male and female sex organs, explaining clearly how the mistake arises (*HA* 579b 15–29; *GA* 757a 3–13), but the idea of the sex-changing hyena was powerful enough to resist rational explanation, and became proverbial (e.g. Ovid *Met.* XV.410), as did the idea that hyenas have a continuous ridge of bone instead of teeth. Belief in the hyena's uncanny nature came about because of its marginal status: it lives on the fringes of human settlements, and in appearance is like a hybrid of other animals – Diodorus (III.35.10) described it as a cross between a dog and a wolf, and Dio (LXXVII.1.4) as a combination of dog, fox, lioness and tiger. It also has a weird cry (today the spotted hyena is also known as the laughing hyena), and the ancients despised its willingness to dig up and eat corpses and its 'cowardly' nature. This nexus of ideas is expressed in Dio's story of an infamous Spanish bandit in the time of Augustus who had adopted the name 'Corocottas' (LVI.43.3; see Braund 1980).

Aelian's story adds a colourful illustration of Pliny's summary, emphasising the hyena's ability to overpower larger or fiercer animals in some mysterious way, and the way in which it creeps about at night undetected. At VII.22 he includes a similarly lively description of the *corocotta* hiding in the wood to eavesdrop on the woodcutters and learn their names, then calling to a man and gradually receding into the woods so that the man will follow it to a lonely place where the *corocotta* can kill him.

4. Medical uses of the hyena

Pliny Natural History XXVIII.92–102

The Magi hold the hyena in the highest admiration of all animals, crediting it with magical abilities and power, by which it beguiles men's senses and entices them to itself. I have already described its annual changes of sex and other aspects of its weird nature: now I will set out what is said of its medicinal uses. . . . [The Magi] add that hyena's teeth cure toothache by touch to the corresponding tooth, or as an amulet, the shoulder treats pain in the shoulders and upper arms; the teeth from the left side of the jaw, wrapped in sheep- or goatskin, relieve stomach pain, the lungs eaten as food cure intestinal problems, and their ashes, applied with oil, are good for pain in the belly. Tendons are treated with marrow from the spine combined with old oil and hyena gall; for quartan fever the liver should be eaten three times before attacks; gout is cured by the ashes of the spine combined with the tongue and right flipper of a seal, with the gall of a bull, boiled up together and applied in a hyena's skin; also useful for the same disease is hyena gall with the stone of Assos. For tremors, spasms, twitching and palpitations a piece of the boiled heart should be eaten, and the rest reduced to ashes and applied with hyena's brain; hairs can also be removed with this ointment, or with the gall, with hairs previously plucked out if they are not wanted to grow again. Unwanted eyelashes can also be removed in this way. For pains in the loins the flesh from a hyena's loins should be eaten, and also rubbed on with oil; in women barrenness can be cured with a hyena's eye eaten with liquorice and dill, guaranteeing conception within three months. They say that one of the large teeth is good as an amulet, tied on with linen thread, against night terrors and fear of ghosts; for delirium fumigation with the same tooth, or tying it on the patient's chest together with fat from the kidneys or a piece of liver or hide are effective. They say that a woman will not miscarry if she wears an amulet around her neck of the white flesh from a hyena's breast, seven of its hairs and the genitalia of a stag, tied up in gazelle hide; hyena's genitals taken in honey are an aphrodisiac for men, even when they hate intercourse with women – indeed, keeping these genitalia and a vertebra of the spine with the hide still attached in the house promotes domestic harmony.

. . . .
A hyena's palate, dried and then heated with Egyptian alum, applied to the mouth three times, cures bad breath and mouth ulcers. Dogs will not bark at those who wear a hyena's tongue in their shoe under the foot; the left side of the brain, applied to the nostrils, prevents dangerous diseases in men and animals alike; the skin of the forehead protects against the evil eye; the flesh of the neck, either eaten or dried and taken as a drink, cures pain in the loins; pains of the tendons are treated by fumigation with the sinews of the back and shoulders; hairs from a hyena's jaw, laid upon a woman's lips, are a love-charm; a draught made with the liver is good for colic and bladder stones. The hyena's heart, either eaten or in a drink, helps with all kinds of bodily pains, the spleen with diseases of the spleen, the caul with oil is good for ulcers which are inflamed, and the marrow for pains in the spine and weakness of tendons.

COMMENT: This extract is part of a long compendium of cures and charms using all parts of the hyena, from the brain to the anus, taken by Pliny from the Eastern medical tradition (Dickie 2001: 117–22). He describes more than seventy applications for hyena organs, some to cure diseases on a 'like cures like' principle, and some to provide amulets and charms, which could apparently

prevent hallucinations, calm dogs, ensure accurate targeting of the spear, bring positive outcomes to lawsuits and make effeminate men severe and modest. At XXXVII.168 in his discussion of stones Pliny also mentions the *hyaenia*, a stone found in the eye of the hyena, which is supposed to confer the ability to foretell the future. The exotic origins of the material are plain, since none of the remedies suggested would be easily found in Italy, although Lucan demonstrates that at least some of these ideas found their way into the mainstream by including in a list of magical ingredients at *Phars.* VI.672 'the hump of the dread hyena'. Hyena skins do appear in the third-century *Edict of Maximum Prices* of Diocletian (8.19–20), when they were commonly enough traded to require the setting of a maximum price.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer: the world's earliest proverb collections* (2 vols) (Bethesda 1997).
 J. Boardman, *Greek Gems and Finger Rings. Early Bronze Age to Late Classical* (Oxford 1970).
 D.C. Braund, 'Corocottas: bandit and hyena', *LCM* 5.1 (1980), 13–14.
 M. Brottman, *Hyena* (London 2012).
 W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the gift of Osiris* (2 vols) (London and New York 1977).
 N. M. Davies, 'Amenemḥab encountering a hyena: from the Tomb of Amenemḥab at Thebes (no. 85)', *JEA* 26 (1941), 82.
 M.W. Dickie, *Magic and Magicians in the Greco-Roman World* (London 2001).
 L. Evans and J. Swinton, 'Force-feeding animals in Old Kingdom scenes: a reply', *Göttinger Miszellen* 232 (2012), 137–42.
 P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 S. Ikram, *Choice Cuts. Meat Production in Ancient Egypt* (Leuven 1995).
 G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
 T. Legge, 'Hyenas at Amarna', *Horizon. The Amarna Project and Amarna Trust Newsletter* 6 (2009), 8.
 P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).

WOLF

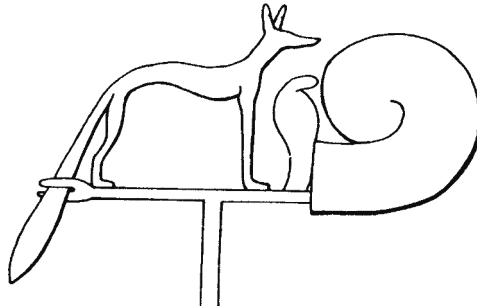
The ancestor of the domestic dog and closely related to the jackal, two types of wolf (Hebrew, *ze'eb*; Akkadian, *zību*) were known to the peoples of the Near East (with the exception of Egypt – see no. 1 below): the small Arabian wolf (*Canis lupus arabs*) and its larger counterpart, the Iranian wolf (*C. lupus pallipes*). Both kinds could be found throughout Mesopotamia, southern Anatolia and the Levant. Essentially opportunistic scavengers-cum-hunters, these wolves lived far beyond the urban centres of the East, but were familiar sights to shepherds and other pastoralists who had to defend their flocks against wolf raids. The Greeks and Romans, however, were more familiar with the large and muscular Eurasian grey wolf (*Canis lupus*), which was the largest common predator in classical Europe, and was found throughout the Mediterranean world (they are now extinct from much of Europe). Pliny notes that unlike most other animals, the wolves of Egypt and Africa are small and weak, while those from northern regions are much bigger and fiercer (*NHVIII.34*); grey wolves (Gk *lukos*, Lat. *lupus*) are capable of bringing down very large prey when working as a pack. While mountainous regions were particularly known as haunts of wolves, they inhabited all regions of Greece and Italy, and were significant predators of herd animals, particularly sheep and goats (Varro *De re rust.* II.9.1–2). Agricultural writers emphasise the need for shepherds to remain constantly vigilant for wolf attacks, and wolves were also considered to pose a threat to humans: the ancients waged permanent war against them by

hunting, trapping and poison, although such measures were largely ineffectual in the face of wolf population numbers (Marcinowski 2001: 14–17).

Wolves' habits were not well understood in antiquity, since they are generally shy of humans and live in wild places, and as a result ancient scientists retained many erroneous beliefs, influenced by folk tales, such as the idea that wolves gave birth on only a few days in each year (Buxton 1987: 62). But for both the Greeks and the Romans the wolf was an important animal: it was the subject of more proverbial sayings than any other animal (see Lewis and Short 1969: s.v. *lupus*), was a frequent subject of omens and was credited with anthropomorphic qualities of cunning and intelligence. Indeed, the Romans devised their own tradition of the werewolf, bridging the divide between human and animal.

1. Standard of the Egyptian wolf (?)–god Wepwawet

Detail from a Middle Kingdom stele from Asyut, Middle Egypt



COMMENT: Wepwawet, whose name means ‘Opener of the Way’, is frequently depicted on top of a standard with the uraeus cobra of Wajet in front of him, as well as an item of uncertain identification – the *shedshed* – which may represent a ceremonially preserved royal placenta, in token of the idea of Wepwawet as ‘opening the way’ of the womb at a royal birth (see further discussion of its identity in Evans 2011 as a schematic representation of a canid den). The god is depicted as a canine or a canine-headed man. Although difficult to differentiate iconographically from the jackal god Anubis, when colour is present Wepwawet is usually grey and Anubis always black; this has suggested to some Egyptologists that the god’s canine form is actually that of a wolf. This is difficult to confirm: the wolf, after all, was not indigenous to Egypt and it is possible that in the pharaonic period, Wepwawet was a composite canine, incorporating elements of dog, wolf and jackal (see Rice 2006: 158; Wilkinson 2003: 191–2). From the Ptolemaic period onwards, however, the Greeks, who were familiar with Eurasian wolves from their homeland, conferred the wolf-identity onto Wepwawet: his cult centre at Asyut in Middle Egypt was renamed ‘Lykopolis’ (Wolf City) by the Greeks. Interestingly, wolves enter into Egyptian demotic literature during the Greek period too; one such occurrence comes in the popular adventure tales of Setne. In *Setne II*, a sorcerer claims to be able to interpret the howling of wolves (Lichtheim 1980: 149). This in itself is interesting, as Arabian and Iranian wolves rarely, if ever, howl (the bible never refers to howling wolves); thus in the Demotic stories the familiar habit of the Eurasian wolf is recorded.

2. Metaphor for the nature of the wolf

Hebrew bible, Genesis 49.27

Benjamin is a ravenous wolf;
in the morning he devours the prey,
in the evening he divides the plunder.

COMMENT: When the Hebrew patriarch Jacob lay on his deathbed, blessing his numerous sons and describing the attributes of his tribal descendents, he characterised his youngest son Benjamin, the child of Rachel, as a predatory wolf. Hence, the Benjaminite tribe became known for its fearlessness and cruelty: its most famous son, Saul, Israel's first king, certainly had a wolf-like nature.

In ancient Near Eastern thought, the wolf, like the dog and the pig, was regarded as ravenous and unclean. The wolf was the ultimate symbol of the outcast, since in the wild it is always on the move; hunger drives it from place to place in search of fresh hunting grounds. During the spring and autumn wolves tend to roam alone, whereas in summer and winter they travel in family groups, often combining with other groups to form larger packs. Wolves will feed on small or large prey and they will not hesitate to approach humans or invade inhabited places if the need arises – this helps explain the endemic lupophobia witnessed across the ancient Near East.

The Hebrew bible frequently alludes to wolf attacks taking place during the evening and at night (Zephaniah 3.3; Habakkuk 1.8), reflecting their natural habit of remaining concealed during the daytime and coming out in search of food only at dusk (on their killing and eating habits see Bright 2006: 116–20). Wolves are opportunists, taking food wherever they can find it, and became proverbial for savage gluttony ('evening wolves . . . leave nothing for the morning' notes Zephaniah 3.3). Thus, when the prophet Jeremiah (5.6) issued his threat that 'a wolf from the desert shall destroy', the inhabitants of Jerusalem knew exactly what he meant. Likewise, Ezekiel (22.27) described the nobility of Jerusalem as 'wolves tearing their prey; they shed blood and kill people to make unjust gain.' In the Greek New Testament, the savage image of the wolf is almost always used in reference to sheep; the wolf represents those who would destroy the 'flock' of Christian believers (Matthew 7.15, 10.16; John 10.12; Acts 20.29).

3. A vision of universal peace

Hebrew bible, Isaiah 11.6–7; 65.25

The wolf will live with the lamb,
the leopard will lie down with the goat,
the calf and the lion and the yearling together;
and a little child will lead them. . .
The wolf and the lamb will feed together,
and the lion will eat straw like the ox,
and dust will be the serpent's food.

COMMENT: Isaiah's famous vision of a messianic utopia links the wolf and the lamb together in peaceful co-existence, alongside all other predatory creatures which have become so tame that a child can control them. The idea of a wolf's restraining its desire to eat a lamb would have appeared incredible to pastoralists such as the ancient Hebrews. The Isaiah passage shares its utopian theme with other Near Eastern texts, such as a series of Sumerian mythological stories about

Enki and Ninhursag which describe a paradisiacal world, devoid of danger from animals: 'In those days, there being no snakes, no scorpions, no hyenas, no lions, no dogs, no wolves, neither fear or terror, humanity had no enemy!' The wolf-and-lamb image is specifically recalled in another Sumerian text (Enmerkar and the Lord of Aratta): 'In Dulmun (a never-never land) . . . the lion makes no kill, the wolf snatches no lamb' (Alster 1983: 53, 63).

Much of the symbolism utilised by Jesus and his followers derived ultimately from Isaiah's vision, unsurprising in a pastoral culture where sheep were a valuable commodity (see further SHEEP nos 7, 8, 16). In the New Testament, Jesus explains his relationship towards his followers in the form of shepherding:

I am the good shepherd. The good shepherd lays down his life for the sheep. The hired hand is not the shepherd and does not own the sheep. So when he sees the wolf coming, he abandons the sheep and runs away. Then the wolf attacks the flock and scatters it.
(John 10.11–12)

and here the wolf appears again as the agent of destruction.

4. The dog, the fox and the wolf

Babylonian Contest Fable (Lambert 1996: 192–5)

The Wolf crouched inside his hole,
The Dog kept guard of (the) entrances. . .
The Dog opened his mouth as he bayed,
Fearful (to the Wolf and Fox) was his bellow,
Their hearts were so overcome that they secreted gall. . .
The Wolf heard the word of the Dog,
His heart became fearful,. [. . . .]
'[. . .] O mighty one, endowed with strength, fast runner. . .
[You sit] like a god, clothed in awe and dread. . .
Your hold on my children is merciless. . .
Your terrible horror, which my youngsters [of my house] constantly fear. . .'
The Fox answered, weeping bitterly,
His heart grew incensed, and his tears were profuse;
He addressed them:
'You, Wolf, are an image of backbiting,
An evil-doer who cuts his friend's throat. . .'
The Dog opened his mouth as he spoke,
Fearful to them was his bellow,
Their hearts were so overcome that they secreted gall.
[The Dog said, 'I am the sergeant of my city. . .
[I am] the latch of the door-thong and lock-pin. . .
When the Wolf has hastily seized [.]
When the Fox has been indiscreet [.]
See, I will open my mouth and my brothers will [assemble]
The glistening bitches like stars in the sky [. . .]
The bitches will tear apart [. . .] like a teasel. . .'
The Wolf heard the word of [the Dog]. . .

'Dog, your mother who bore you is Fire, [your] father [. . .]
Your brothers are Flames that set alight the night [. . .]
Enlil created you for the help of [mankind]. . .'

COMMENT: This charming and lively debate is typical of an Old Babylonian literary genre known as the Animal Contest Fable (compare HORSE no. 1). From the surviving fragments it appears that a wolf and a fox have been caught in the act of stealing sheep by a domesticated sheepdog, and here they are brought by the dog before the gods to plead their cases for pardon. The dog is the morally superior of the trio, representing civilisation and domestication, the fox is weak-willed and whiny, while the cunning wolf is obsequious in his lavish praise of the sheepdog's prowess and skills. Both fox and wolf blame one another for the atrocity. Funny and quirky, the fable nonetheless emphasises the Mesopotamian belief in the sneaky cruelty of the wolf, which was considered the social outsider *par excellence*.

5. Ishtar punishes her goatherd lover

Epic of Gilgamesh (*Old Babylonian version, tablet vi*)

You loved the goatherd, the grazer, the herdsman
who regularly piled up for you [bread baked in] embers,
slaughtering kids for you everyday.
You struck him and turned him into a wolf,
so his own goatherd boys drove him away,
and his dogs take bites at his thighs.

COMMENT: In this section of the world's first epic poem, the hero Gilgamesh confronts the goddess Ishtar who wishes to marry him, reminding her of her poor track record with previous lovers: her former husband, Tammuz, the shepherd, became a captive in the underworld and is mourned in festivals every year. Another shepherd she loved became a broken-winged bird. She loved the lion, then ensured that he was captured in ambush pits. She loved the stallion, but contrived harnesses and whips and spurs to control him. When a goat herder loved her, she turned him into a wolf. When her father's gardener rejected her advances, she turned him into a frog. Here, Gilgamesh asks why he should expect to fare any better.

Ishtar's manner of rejecting her goatherd-lover is vindictively cruel as his metamorphosis into the animal which he daily fights and guards his flocks against renders him into his own worst enemy (Marvin 2012: 47). His sheepdogs, one-time protective guardians, now savage him, and with his fellow goatherds in pursuit, he is driven out into the wilderness – the correct domain of the wolf. The story finds a later reflection in the Greek myths of King Lycaon, who, having angered Zeus, is turned into a wolf and driven away from civilisation (Ovid *Met.* I.232–40), and of Actaeon (*Met.* III.143–252). Passage 10 below follows this theme of metamorphosis into the related topic of lycanthropy.

6. Wild wolves

Homer Iliad XVI.155–67

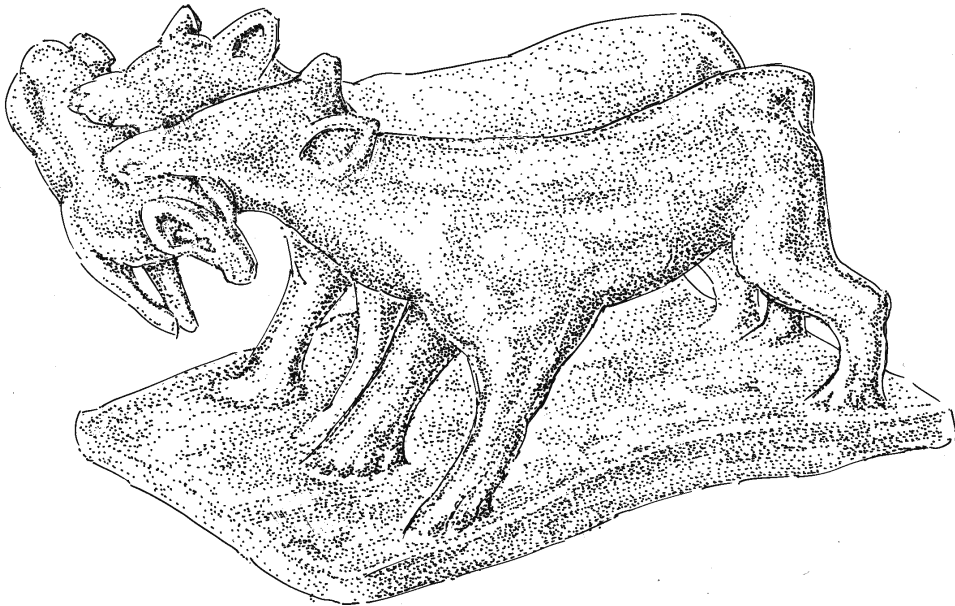
Straightaway Achilles went out to the Myrmidons and gave
Them all their arms among the tents; and like a pack

Of flesh-eating wolves, with tireless strength in their hearts,
Who have brought down a great horned stag in the mountains
And feed on it, their jaws dripping with blood;
And then they go in a pack to drink from the dusky spring,
Lapping the dark surface of the water with their narrow tongues
And belching up clotted blood; in them the spirit is fearless
And their bellies are crammed full and groaning;
So the lords and guardians of the Myrmidons rushed forth
Around the noble servant of the swift-footed son of Aiakes;
Warlike Achilles himself stood in the midst of them
Urging on the horses and the warriors with their shields.

COMMENT: Homer's famous simile compares Achilles' Myrmidons to a wolf-pack in the wild, and emphasises the characteristics typical of wolves for the Greeks: their implacable desire for flesh, driven by hunger, their co-operation and their brutal and terrifying nature. For the ancients, wolves lacked the noble character of other predators such as lions; their savagery meant that tales of wolves showing gratitude to benefactors were absent. Virgil uses a similar comparison for the Trojan warriors as they launch a final doomed attempt to defend their city (*Aen.* II.355–60), and in both cases the comparison of men with wolves is a troubling one, suggesting an unreasoning, instinct-driven ferocity instead of human rationality.

7. The wolf as predator of flocks

*Terracotta, Paris, Louvre CA370, from Tanagra,
c. 525 BCE (drawing by Tessa Rickards)*



COMMENT: This terracotta, depicting two wolves carrying off a young ram, dates from the end of the sixth century BCE, and was found at Tanagra in Boeotia. The purpose of this and similar groups is difficult to define. Many terracottas have been found in graves, and they were also dedicated in temples as votive offerings (Calder 2011: 67). The behaviour to which the figurine alludes is clear – the wolf's habit of seizing and carrying off animals from flocks and farms, as described by Columella (see WORKING ANIMALS no. 5). But was it an offering to a god made in the hope of gaining protection for the flocks? Divine intervention was often sought to deter wolves – epigrams in the *Greek Anthology* include a dedication made to Pan by a shepherd for protection from wolves and a fertile flock, and a comic claim by a statue of Hermes to be a better protection against wolf predation than Herakles (*Greek Anthology* VI.99, IX.72) – and it is probably right to see this terracotta as serving a similar dedicatory purpose.

8. The wolf as totem animal

Two-drachma coin, Rome, 269 BCE (RRC 20)



COMMENT: This coin, one of the earliest silver coins minted at Rome, carries the familiar image of the twin founders, Romulus and Remus, suckled by the she-wolf, with a head of Herakles on the obverse. It is struck to the Greek monetary standard of the drachma, and reproduces the form of coinage from the Greek cities of South Italy from whom the Romans adopted the concept of silver coinage (Crawford 1974: no. 20). The wolf and twins became the dominant symbol of the earliest history of Rome, appearing on coins, statues, altars and sarcophagi (Presicce 2000). Yet despite the realistic appearance of the she-wolf, this is not a representation of the myth: it is the image of a statue already well known in the city. The magistrate responsible for the coinage, Q. Ogulnius, chose as designs the statues which he and his brother had dedicated in Rome in 296 (Livy X.23.11), including Zeus in a quadriga as well as this statue of the she-wolf, which was sited by the *figus Ruminalis*, traditionally the place where Romulus and Remus had been nursed. The story of the wolf and twins was thus already well established by the start of the third century, and according to Rauflaab (2006) the wolf is in fact the older part of the story: wolves were sacred to Mars (Virgil *Aen.* IX.566), and the identification of the animal which rescued the twins as a wolf was an aspect of this connection. The wolf, then, was the totem animal of Rome,

and during the Social War in the first century BCE, when the Italians wished to represent their victory over the Romans on coins, they chose the image of the Italian bull trampling the Roman wolf (Rutter 2001: 55–7). The Romulus and Remus story thus served to reinforce the close connection between the wolf and the city.

9. An encounter with a wolf

Plutarch Dion 26.5–27.1

The rumour [of Dion's invasion] quickly reached Syracuse, where Timocrates, who was married to Dion's former wife the sister of [the tyrant] Dionysius, and who had been left in charge of Dionysius' supporters in the city, hastily sent a messenger off to Dionysius with a letter informing him of Dion's arrival. Meanwhile he set himself to calm the disturbances and upheaval in the city, since all the people were stirred up, although as yet they maintained the peace through uncertainty and fear.

But a very strange thing happened to the man who had been sent with the letter. He sailed over to Italy and was passing through the territory of Rhegium, hurrying to reach Dionysius at Caulonia; on the way he met a friend of his who was carrying an animal which he had just sacrificed. The man accepted a portion of the meat from him and hastened on his way. But after journeying on for part of the night he was forced through weariness to sleep for a little while, and so lay down in the trees beside the road. A wolf came along, attracted by the scent of the meat, seized the flesh, which was fastened to the man's wallet containing the letter, and ran off carrying the meat and the wallet with it. When the man awoke and realised what had happened, he wandered about for a long time looking for the wallet, but was unable to find it and so decided not to go on to the tyrant without the letter; instead he ran away and disappeared. Dionysius was thus fated to learn of the war in Sicily late and from other sources.

COMMENT: This entertaining story is a useful reminder of how thinly populated the Mediterranean world was in classical times: even a journey through the long-settled toe of Italy involved passing through wild territory in which large predators roamed. Stories of wolves attacking and eating travellers abounded in antiquity, though most considerably exaggerated the danger: Pausanias (VI.14.5–6) relates the death of the famous athlete Milo of Croton, who tried to split a tree trunk with his bare hands, became trapped, and was eaten by a pack of wolves, while epitaphs in the *Greek Anthology* commemorate the fate of a shipwrecked traveller who made it to dry land, only to be promptly eaten by a wolf (GA VII.289, 7.550). Aristotle (HA 594a 30–1) notes that lone wolves are more dangerous to people than wolves hunting in a pack, and there is plainly a desire, similar to that in modern times, to exaggerate the wolf's man-eating tendencies. In this story, however, the wolf is an opportunistic scavenger, after an easy meal, which lends the account more verisimilitude. Stories of this kind, however, always become less convincing on close examination – where does the detail of the chance encounter with the friend and the wallet-stealing wolf come from, if the man involved subsequently disappeared? – but it nevertheless illustrates how common wolves were in ancient landscapes.

10. Wolves as omens

Livy History of Rome XXXIII.26.6–9

Before either the praetors had set out to what might be called this new war, since it was the first time that the Spaniards had taken up arms on their own account without a Carthaginian army or general, and before the consuls had departed from the city, they were ordered to expiate the prodigies which were being reported. Publius Villius, a Roman *eques*, who was travelling to the Sabine territory, was struck by lightning and killed, together with his horse; the temple of Feronia in the district of Capena was struck by lightning; at the temple of Moneta the tips of two spears burst into flames; and a wolf entered Rome through the Esquiline Gate, ran through the most crowded part of the city into the Forum, along the Vicus Tuscus and from there to Cermalus, then escaped virtually unharmed through the Capena Gate. These prodigies were expiated with the sacrifice of full-grown victims.

COMMENT: The collections of *prodigia* which Livy records at the start of each year come from the Annals of the chief priests; strange and ominous events in Rome and the provinces are recorded, along with the measures taken to expiate them. Wolves appear very frequently among the omens, and the prodigy in which a wolf enters the city, or an army camp, is recorded no fewer than twenty times (Trinquier 2004; Rasmussen 2003). Livy's example here is one of the most detailed, describing the wolf's path through Rome from east to south; other similar prodigies describe the consternation caused by the appearance of a wolf in the city, and attacks on gate guards (Livy XXVII.37.3, XXXII.29.2, XLI.9.6). We need not believe that wolves regularly entered Roman cities and ran about in the Forum, nor indeed that they came into army camps by night and devoured men silently, leaving only the head (App. BCV.79). What is significant is the idea that it could happen, and that the appearance of a wolf, although it was the totem animal of Rome, should be such an ominous event. Trinquier, in an exhaustive study of the phenomenon, proposes that the wolf's symbolic status as a creature of the wild, known for its savagery, made its entry into the civilised world of the city a transgression of the normal order. Certainly the contradictions perceived in the wolf's character made it an appropriate creature to manifest divine will through unusual behaviour: although wild, they appeared in and around human settlements in search of prey; though very fierce they were also cowardly; they lived in packs, but did not share or obey laws like other sociable animals (see also EAGLE no. 5).

11. A werewolf story

Petronius Satyricon 61–2

'While I was still a slave, we lived in a narrow street, in what is now Gavilla's house. There, as the gods would have it, I fell in love with the wife of Terentius the innkeeper, Melissa the Tarentine whom you all know, a very pretty plump girl. But on my word, I did not love her because of her looks or for lustful reasons, but because she was so sweet-natured. If I asked her for anything, she never refused me; if she made a penny, she gave me a ha'penny; whatever I had I gave to her for safekeeping, and she never deceived me. Well, her husband died one day at his master's estate, and I readied my shield and greaves and planned how I might make her mine: for you know, friends appear in tight places. As luck would have it my master had gone away to Capua on some trifling business,

and so seizing my opportunity I persuaded one of our guests who was a soldier, and as brave as Orcus, to accompany me as far as the fifth milestone.

Well, we rolled away at cockcrow, under a moon shining as bright as day. We came in among the tombs along the road; my companion went off among the stones to do his business, and I sat and sang to myself and counted the tombstones to pass the time. Then as I looked round at my companion, he stripped off his clothes and piled them all beside the road. My heart was in my mouth, but I stood stock-still. Then he peed in a circle around his clothes, and suddenly he changed into a wolf! I'm not making it up; I wouldn't lie about this for the greatest fortune in the world. But, to continue the story, once he had turned into a wolf, he began to howl and ran away into the woods. To begin with I hardly knew where I was, but then I went over to pick up his clothes, and I found that they had been turned to stone. I was scared to death. But I drew my sword and went hacking at shadows for the rest of my journey. At last I arrived at the estate where my beloved was, and went in as white as a ghost, half-dead with fright, with sweat rolling down me and staring eyes, and I could hardly be revived. Melissa was astonished to see me arrive so late, and said, "If you had come earlier, you could at least have helped us; for a wolf got into the farm and savaged the flocks, a real bloodbath. But it didn't get away unscathed, even though it ran off; one of our slaves go a spear into its neck."

When I heard this I couldn't get a wink of sleep, and at daybreak I rushed back to my master Gaius' house like an innkeeper who's been cheated, and when I came to the place where my companion's clothes has been turned to stone, all I found there was blood. But when I reached home my pal the soldier was lying in bed there like a felled ox, with a doctor attending to his neck. I realised that he was a werewolf, and since then I've never broken bread with him, no, nothing would persuade me to. Other people may have their own opinions about this story, but if I tell a lie, may it come back to haunt me.'

COMMENT: This lively and colloquial story is told by a speaker at Trimalchio's dinner party in the *Satyricon*, and while it is intended as a fantastical tale (with many protestations as to its truth), it is valuable for its depiction of popular Roman beliefs. The extent of traditions about werewolves in classical antiquity is debated: tales of humans turned into wolves or other animals by the gods are common, but the concept of the shapeshifter, able to move from one form to the other, is harder to find. Herodotus includes in his *Histories* a story about a distant Scythian tribe, the Neuri, among whom each man is said once a year to change into a wolf for a few days and then return to human form (IV.105), and several other writers, Greek and Roman, record stories of rituals in Arcadia which see men transformed into wolves for nine or ten years, after which they are restored (Buxton 1987: 67–9). No writer claims to believe these stories, but Pliny (*NH* VIII.34) comments that the idea of '*versipelles*', shapeshifters, is strongly rooted in popular traditions, and the detail of Petronius' tale – the clothes turned to stone, the moonlight, the man retaining in human form the wound which he sustained as a wolf – indicates that such tales were familiar. The Romans were not in general great creators of monsters, most of those familiar from classical antiquity being Greek in origin, and the werewolf is thus one of the very few creations of the Roman imagination, becoming part of a wider European tradition (Milin 1993: [ch. 1](#)).

Bibliography

- B. Alster, 'Dilmun, Bahrain, and the alleged Paradise in Sumerian myth and literature', in D. Potts (ed.), *Dilmun. New Studies in the Archaeology and Early History of Bahrain* (Berlin 1983), 39–74.
B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).

- M. Bright, *Beasts of the Field* (London 2006).
- R. Buxton, 'Wolves and werewolves in Greek thought', in J. Bremmer (ed.) *Interpretations of Greek Mythology* (London 1987), 60–79.
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals 600–300 BC* (Oxford 2011).
- M. Crawford, *Roman Republican Coinage* (London 1974).
- L. Evans, 'The shedshed of Wepwawet: an artistic and behavioural interpretation', *Journal of Egyptian Archaeology*, 97 (2011), 103–15.
- W.G. Lambert, *Babylonian Wisdom Literature* (Winona Lake 1996).
- C.T. Lewis and C. Short, *A Latin Dictionary* (Oxford 1969).
- M. Lichtheim, *Ancient Egyptian Literature. Volume III: The Late Period* (Berkeley 1980).
- A. Marcinowski, 'Le loup et les grecs', *Anc. Soc.* 31 (2001), 1–26.
- G. Marvin, *Wolf* (London 2012).
- G. Milin, *Les chiens du Dieu: la représentation du loup-garou en Occident (XI^e–XIX^e siècles)* (Brest 1993).
- C.P. Presicce, *La Lupa Capitolina* (Rome 2000).
- S.W. Rasmussen, *Public Portents in Republican Rome* (Rome 2003).
- K. Rauflaab, 'Between myth and history: Rome's rise from village to empire', in N. Rosenstein and R. Morstein-Marx (eds), *A Companion to the Roman Republic* (Oxford 2006), 125–46.
- M. Rice, *Swifter than the Arrow. The Golden Hunting Hounds of Ancient Egypt* (London 2006).
- M. Rissanen, 'Was there a taboo on killing wolves in Rome?' *QUCC* 107 (2014), 125–47.
- N.K. Rutter (ed.), *Historia Numorum: Italy* (London 2001).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- A. Trinquier, 'Les loups sont entrés dans la ville: de la peur du loup à la hantise de la cité ensauvagée', in M-C. Charpentier (ed.), *Les espaces du sauvage dans le monde antique: approches et définitions* (Besançon 2004), 85–118.
- R.H. Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003).

FOX

Judging from the surviving literary evidence, the fox was a frequent subject of ancient conversation, and many ancient sayings and stories about foxes are deeply embedded in modern tradition: Archilochus' maxim about the fox and the hedgehog (fr. 201 West), for instance, or Aesop's many fables with the fox as crafty protagonist (see further Wallen 2006: 39–71). The red fox (*Vulpes vulpes*) is indigenous to Egypt, Greece, Italy and the western Roman empire, and no less than five species of fox are native to the Near East (two of which – Rüppell's fox (*V. rueppelli*) and the fennec (*V. zerda*) – are specialised desert dwellers). Fox remains are common at human sites from prehistoric times (Osborn and Osbornova 1998: 69; Yannoulis 2003: 179–82), yet references to and depictions of actual foxes are strangely limited in ancient sources.

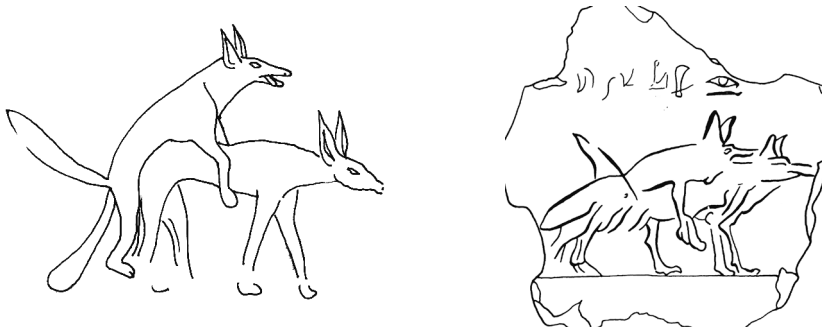
Among the Egyptians, Mesopotamians, Hebrews and Greeks foxes were seen primarily as pests of the vineyard, prone to eating ripe grapes. While foxes will eat fruit, it seems unusual to a modern audience that foxes preying on domestic birds was not seen as a greater problem, but perhaps the relative rarity of chickens as farmyard birds (see CHICKEN) made this role less immediate. Instead, fables such as the story of the fox and the grapes (Perry 15), and poems such as Theocritus' *Idyll* 1.48–51 depict foxes robbing vineyards, and a fox with a bunch of grapes even appears as a shield blazon on a cup in Cambridge (Fitzwilliam Museum G70). As nuisance animals foxes were regularly trapped and killed, though their fur was not widely used as far as we can tell: it was seen as distinctive to Thrace, to the north of Greece (Hdt.VII.75; Song of Songs 2.15; Kitchell 2014: 70–1).

Roman writers have even less to say about foxes: Pliny, for instance, does not comment on the appearance, behaviour or habits of the fox in Book VIII of his *Natural History*, and even Aelian's tales are few. One reason for this may be that foxes were simply more shy of humans in antiquity: the first-century BCE agricultural writers, Varro and Columella, do not mention foxes among

potential predators of birds or rabbits (the weasel, cat and hawk are named instead), though Varro, like the Greeks, thought that foxes were a threat to vineyards (*De re rust.* I.8.5). Horace (*Ep.* I.7.29–36) uses a simile of a fox in a granary, eating rodents, and only later in the fourth-century CE works of Palladius (I.18) and the *Geoponica* (XIV.9) is the need to protect fowl from foxes emphasised. Compared to larger carnivores such as the wolf, foxes played a very small role in Roman culture: only the cruel practice of fox sacrifice at the festival of the Cerealia (below no. 3) bears witness to the presence of actual foxes at Rome.

1. Lustful foxes

a) Line drawing of a detail of a wall relief from the mastaba of Ptahotep, Saqqara, Egypt, V Dynasty (after Osborn and Osbornova 1998: 70) and b) of a limestone shard from Dier el-Medina, XX Dynasty (after Keel 1994: 109)



COMMENT: Red foxes are often depicted in Egyptian art, both in tomb imagery and in lively sketches on ostraca and papyrus. They are depicted hunting, foraging, fighting, sleeping and mating. In fact, the fox in heat was a potent symbol in Egyptian love poetry and calling one's beloved a 'fox' had clear erotic connotations (compare the modern English term 'foxy'). The terms 'fox' and (especially) 'young fox' denoted a womaniser or an ardent lover and in one New Kingdom song, a woman therefore states:

My heart is not yet done with your lovemaking,
My young fox!
Your liquor is your lovemaking!

The fox was connected to the sex-goddess Hathor and in one hymn to the deity a pair of lovers raise their voices in praise of the fox (Keel 1994: 110). The hieroglyph *ms* – made up of three fox pelts – is often used in words connected to eroticism and fertility (it strictly means 'birth' or 'to bring forth'; the name 'Moses' is created from this sign).

2. The arrogant, cowardly fox

Sumerian sayings, proverbs and fables (Kramer 1956: 124–6, 278; Alster 2005: 345–7)

May foxes that frequent rubbish heaps brush with their tails your fattening-pens established for purification ceremonies!

Once there were nine wolves, but ten sheep, one too many to divide among them. When the fox came upon them, he said, 'Let me divide the shares. For you, being nine, there is one. I, being one, will take nine. That is my preferred share.'

The fox, having urinated into the Tigris river, said, 'I have raised the spring flood.'
The fox, having urinated into the sea, said, 'My urine is the whole ocean.'

The fox had a staff with him, 'Whom shall I beat?'
The fox had a writ with him, 'Whom shall I sue?'

The fox gnashed his teeth, but his head was trembling.

The fox trod upon the hoof of a wild ox, asking, 'Did I hurt you?'

The fox could not build his own house, so he went to the house of a friend and like a conqueror he possessed it!

The fox says to his wife:

'Come! Let us crush the city of Uruk with our teeth as though it were a leek! Let us strap the city of Kullab upon our feet, as though it were a sandal!'

But when they had not even come within a distance of 600 *gar* (= two miles) of the city, the dogs began to howl at them from within the city: . . . 'Go home! Go home now!' they howled menacingly from within the city. [The fox and his wife flee.]

The fox requested the horns of a wild ox from the god Enlil (and so) the horns of a wild ox were attached to him. But then the wind and rain were stirred up, and he could not enter his burrow. Towards the end of the night, when the north wind blew cold and the storm clouds had showered (down?) upon him, the said, 'As soon as it gets light . . . [take these horns off me (?)].

Enlil . . . covered the prow of the boat with a reed mat . . . like a merchant he left Nippur downstream. He did not moor the boat at the quay or Larsa but [directed] the boat [onward]. After the fox had spoken to the merchant: 'Merchant! Enlil will seize our boat at the prow, your boat. . . '

The fox saw a dog (and said), 'Citizen, row your boat downstream! Let it return to your place for your sake!'

As the merchant removed the reed mat (from the boat), the fox (at once) took flight onto dry land (swift) like a swallow. The dog followed behind it.

They took different paths. The fox took refuge in a hole belonging to a hyaena. The hyaena did not protest. Seeing the fox it asked, 'Fox, what does it matter that you have come to me?'

The fox answered. . .

COMMENT: The fox is the wild animal that figures most prominently in the proverbs and fables of ancient Sumer and the character of the fox is clearly and consistently drawn. Without exception the fox is a conceited, boastful and rude character in both what he says and what he does. He exaggerates his abilities and his social position, yet he is also a coward, unable to cope in the face of hostility or a crisis and his bravado is often shown to be a sham. Kramer notes that 'the fox of the Sumerians seem to have little in common with the clever and sly beast that he is in much of the later European folklore, although in a number of ways he is very much akin to the fox in several of Aesop's fables' (1956: 126).

This popular conception of the fox as a cowardly, ambitious braggart was deep-set across the Near East. In a letter to one of his vassals, the Hittite king Hattusili I urges him to remain loyal and to ignore the redundant overtures of war of the ruler of Hahhu: 'don't take the side of the fox, who always does hostile things', the Hittite monarch cautions (Collins 2002: 240). In the same vein, when Jesus of Nazareth denounced King Herod Antipas as a fox ('Go tell that fox, I will drive out demons and heal people today and tomorrow, and on the third day I will reach my goal' (Luke 13.32)), he was drawing on this same image. Herod is not being criticised for being sly, but for being a charlatan. Jesus intimates that the client king, sniffing after Roman approval, is like the troublesome second-class predator, the fox – a pesky intruder and interloper whose loud bark is worse than its bite.

3. Samson and the foxes

Hebrew bible, Judges 15.1–8

Later on, at the time of wheat harvest, Samson took a young goat and went to visit his wife. He said, 'I'm going to my wife's room.' But her father would not let him go in.

'I was so sure you hated her,' he said, 'that I gave her to your companion. Isn't her younger sister more attractive? Take her instead.'

Samson said to them, 'This time I have a right to get even with the Philistines; I will really harm them.' So he went out and caught three hundred foxes and tied them tail to tail in pairs. He then fastened a torch to every pair of tails, lit the torches and let the foxes loose in the standing grain of the Philistines. He burned up the shocks and standing grain, together with the vineyards and olive groves.

When the Philistines asked, 'Who did this?' they were told, 'Samson, the Timnite's son-in-law, because his wife was given to his companion.'

So the Philistines went up and burned her and her father to death. Samson said to them, 'Since you've acted like this, I swear that I won't stop until I get my revenge on you.' He attacked them viciously and slaughtered many of them.

COMMENT: In Hebrew the word for 'fox' (*lyim*) is also used for 'jackal', a linguistic foible which places bible translators in something of a quandary when seeking to determine which animal is meant at any given appearance of the word. There is little consensus as to the animal referred to in Judges 15, which relates an incident in the life of the infamous strongman Samson, but it is highly likely that the animals treated so cruelly by Samson are indeed foxes – they are easier to capture than jackals since they come close to human habitation more frequently than their larger cousins (note the line from Song of Songs 2.15: 'Catch for us the foxes, the little foxes that ruin the vineyards, our vineyards that are in bloom') and with conveniently bushy tails, they naturally create a neat 'image of fiery potency' (Wallen 2006: 59).

Support for this interpretation can be found in Ovid's report of a Roman religious rite practised at the festival of Ceres, in which foxes were let loose in the Circus with lit torches tied to them, and hunted (*Fasti* IV.681–712). The aetiological story which Ovid tells is clearly invented to supply an explanation for a rite the origin of which was mysterious, but the similarity between the two practices indicates a common origin in a religious rite intended to ward off disease from the grain harvest: the red colour of the fox is related to the *rubigo* or 'rust' which attacks the grain (Alberto Soggin 1981: 248–9; Spaeth 1996: 36–7).

4. Fox and hound?

***Laconian cup, Rome, Palazzo Poli, attr. to the Hunt Painter,
c. 550 BCE (detail: drawing by Tessa Rickards)***



COMMENT: In the interior of this Laconian cup (formerly in the Metropolitan Museum in New York, but since returned to Rome) two lively animals appear in the exergue. Their bushy white-tipped tails and pointed muzzles would suggest that they are two foxes, but the difference in texture of the right-hand animal's coat might indicate that this is in fact a dog, attacking the twisting fox; the Laconian hound was said erroneously to be a cross between a dog and a fox (Ar. *NA* 607a3), which might be the intended effect here. If the imagery is that of the hunt, it would accord well with other Greek depictions of foxes: they appear fairly frequently on Athenian vases, either dead, being brought home as game by a successful hunter, or in the process of being hunted or trapped (Barringer 2001). Hunting foxes with dogs was not, however, seen as a high-status activity: ancient literary discussions of hunting present foxes as unworthy prey compared to hare, deer or boar, and Xenophon (*Cyn.* 6.3) advises the huntsman to take care not to allow his dogs to chase after foxes because it makes them undisciplined. Richer (2010: 41) links the image on the cup with Spartan admiration of the cunning of the fox, suggesting that it was particularly proverbial at Sparta: the general Lysander is credited with the saying that 'where the skin of the lion is lacking, it must be patched with that of the fox', i.e., that courage must be united with cunning (Plut. *Lys.* 7.4), and the training of young warriors at Sparta involved a period of living outside the community known as the *phouaxir*, 'fox-time' (Hesych. *s.v.*).

5. The cunning fox

Aelian On Animals VI.24

The fox is particularly cunning; for example, it outwits the hedgehog in the following way. Realising that it cannot tackle the hedgehog directly, because the spines prevent it, the fox picks the hedgehog up gently and delicately in its mouth and turns it over onto its back, whereupon it tears it open and easily eats the creature which it previously feared. Foxes in Pontus also have a way of hunting bustards: the fox turns around and stretches itself out along the ground, lifting up its tail so that it resembles the neck of a bird; this deceives the bustards into thinking that the fox is a bird like themselves, so they approach and when they are close the fox jumps up and easily catches them with a violent attack.

Foxes have an equally crafty way of catching small fish: they walk along the riverbank with their tail trailing in the water. The fish swim up and become entangled in the thick hairs of the tail like a net, and when the fox feels this it draws up its tail and shakes it out on dry land, so that the fish fall out and make a delicious meal. And the Thracians use the fox to judge the thickness of the ice on rivers – if the fox can run out across the ice without falling through, they are encouraged and follow it. The fox tests the ice by listening with its ear on the surface; if it hears no flow of water under the ice and no sound from below, it is confident that the ice will bear its weight and runs across without concern. But if it does hear running water, it will not try to step onto the ice.

COMMENT: Aelian's stories show us the familiar crafty fox of fable and proverb, catching its prey not by instinct and dexterity, but with ruses. This view of the fox underlies all ancient accounts, popular and scientific – even Aristotle characterises the fox as *panourgos* (unscrupulous) and *kakourgos* (wicked) compared to the lively and affectionate dog (*HA* 488b 20–2). A whole host of stories about the fox's modes of hunting credit it with human-like intelligence, in 'playing dead' to catch crows (*Opp. Hal.* II.107–19), catching hares by running them to exhaustion (*Ael. NA* XIII.11) and the accounts here of fishing with its tail and posing to trick the bustards. It was said to be difficult to hunt or trap, Oppian explaining that it makes a lair with seven separate entrances so as to be able to avoid pursuit (*Cyn.* III.449–60), and that it is too clever to be caught by net or ambush (*IV*.448–51). Nevertheless, two Attic pots depict foxes caught in spring-traps, one baited with a realistic cow's foot (Calder 2011: cat. 136 and fig. 6, cat. 191).

6. A pet fox?

Martial Epigrams VII.87.1

If my friend Flaccus delights in a long-eared fox. . .

(see PETS no. 12 for the whole poem)

COMMENT: Among the very few references to real foxes in Roman literature and art we find the claim in Martial's epigram that a 'long-eared fox' was among elite Romans' pets. The consensus among commentators is that the animal here is a fennec fox, the small nocturnal desert fox found in North Africa. The list of pets in the poem includes other African animals such as the mongoose and the ape, making it conceivable that fennec foxes were among exotic imported pets. Although not truly domesticated, fennec foxes are popular as pets in some quarters today, being

small, pretty and lively – if taken by humans while still pups they can be tamed, and will adapt to the diurnal rhythm of their owner. There are also a few references to tame red foxes among our sources: Aelian, for instance, says that in the territory of the Caspii there are so many foxes that they come into towns and live in houses as though tame (NA XVII.17). Similarly a reference to pet foxes in Greece has been found in the well-known story of the Spartan boy who stole a fox and subsequently suffered mortal bite wounds while hiding it under his cloak (Plut. *Lys.* 18.1, *Mor.* 234A–B): Ducat (2004: 129) interprets the rather opaque circumstances of the tale as referring to a tamed fox-cub which belonged to a Spartan family as a pet. Although the story has many unlikely features (including the idea that a young fox would and could eat a living human's entrails), the story makes more sense if the fox was a pet rather than game to be eaten, and it is indeed the case that tamed red foxes will revert to wild behaviour if stressed.

Bibliography

- J. Alberto Soggin, *Judges: a commentary* (London 1981).
 B. Alster, *Wisdom of Ancient Sumer* (Bethesda 2005).
 J. Barringer, *The Hunt in Ancient Greece* (Baltimore 2001).
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 B.J. Collins, 'Animals in Hittite literature', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 237–50.
 M. Detienne and J.-P. Vernant, 'La métis du renard et du poulpe', *REG* 82 (1969), 291–317.
 J. Ducat, 'L'enfant Spartiate et le renardeau', *REG* 117 (2004), 125–40.
 O. Keel, *The Song of Songs* (Minneapolis 1994).
 K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
 S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
 D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
 N. Richer, 'Elements of the Spartan bestiary in the Archaic and Classical periods', in A. Powell and S. Hodkinson (eds), *Sparta: the body politic* (Swansea 2010), 1–84.
 B.S. Spaeth, *The Roman Goddess Ceres* (Austin, TX 1996).
 M. Wallen, *Fox* (London 2006).
 E. Yannoulis, 'Non-domestic carnivores in Greek prehistory: a review', in E. Kotjabopalou et al. (eds), *Zooarchaeology in Greece: recent advances* (London 2003), 175–92.

BADGER

Belonging to the *Mustelidae* family which includes otters, weasels and stoats, the eleven known species of badger are squat, stocky omnivores with short legs and long claws ideal for digging. They live underground in setts which often house extended families of badgers, although occasionally a badger opts for a solitary existence. The most commonly encountered badgers in antiquity were the European badger (*Meles meles*) with its distinctive black and white markings and the honey badger or ratel (*Mellivora capensis*), an African and Middle Eastern species with a notorious reputation for ferocity and toughness.

Ancient Egyptian and Near Eastern sources give an occasional nod to the behaviour of the badger (Psalm 104. 18; Evans 2010: 163), but the animal failed to make a major impact in the artistic, literary or cultural spheres. The Akkadian term for 'badger' is *kalab urši*, which must relate the animal to the *kalab mē*, 'otter' – although *kalab urši* can also be used (arguably) for a worm, suggesting that the association to the soil and to burrowing is the defining feature of both creatures. It was an evil portent and to see a badger in an irrigation ditch or at a city gate was a bad omen. Early English translators of the Hebrew bible believed that badger skins were used by the

Israelites as offerings, clothing and as a covering for the sacred Ark of the Covenant (Exodus 25.1–5, 26.14), but the reading of the Hebrew *tēḥāšīm* as ‘badger skin’ is uncertain. *Tēḥāšīm* has been connected to an Assyrian word meaning ‘sheepskin’ and an Egyptian word meaning ‘to stretch or treat leather’ and it is now suggested that the word simply refers to treated soft animal pelts, and has nothing specifically to do with badger skins (Bright 2006: 183–7).

Although the badger was native to the whole of Europe in ancient times, it is barely mentioned by Greek and Roman authors: even its correct name is difficult to discern. This can only be because badgers are nocturnal and extremely shy, impinging little on humans. For the name we are reliant on ancient lexicæ, which state that the Greek word for badger was *arktomus*, ‘bear-mouse’, and that the Latin was *maelis* or *taxo*. Katz (2015) identifies Aristotle’s *trochos* (GA 757a 2–7) as a badger, though the term appears only here, while *piktis*, in a list of a traders’ wares in Aristophanes’ *Acharnians*, is often translated as ‘badger’ and taken as an indication that they were eaten, but this creature is more likely to be a marten, a common confusion in ancient discussions. Varro, for instance, refers to the *maelis* as a predator of hares in *leporaria* (DRR II.12.3), but the agile and carnivorous marten is more likely in the context.

Badger skins are listed in the Edict of Maximum Prices of Diocletian (8.29–30), though with a maximum price of just ten *denarii* for an uncured skin, showing that they were very cheap: the Augustan writer Grattius mentions caps for huntsmen made from badger skin (*Cyn.* 340), but other uses for them are unknown.

1. Badger hunting

a) Pliny Natural History VIII.138

Another form of ingenuity is shown by the badger when it is threatened: by inflating and distending its skin it deflects the blows of men and bites of dogs.

b) Martial Epigrams X.37.17–19

While I am speaking, behold! Your fisherman returns with empty net,
Your huntsman comes, proud to have caught a badger:
All your seaside dinner comes from the city market.

COMMENT: These two references constitute the only clear references to badgers in classical antiquity, and in both sources they appear as a quarry of the hunter. Pliny’s claim that the badger blows itself up when threatened is untrue, though it was repeated in medieval bestiaries: the badger’s hide is thick and defensive, but it has no such tricks. This is all that Pliny has to say about the creature, apart from recommending its liver as a cure for tonsillitis and its dung for the bite of a mad dog (XXVIII.51, 43). Martial’s epigram is a comparison of the culinary delights of Spain with the poor and offputting fare of Laurentum, and here the badger represents the very lowest form of game one could find.

Archaeological evidence seems to support the hunting of badgers in Roman Britain and Germany: Davies (1971: 127) lists badger bones among the animal remains at Roman forts, commenting that this may represent hunting for sport rather than for consumption. It does seem clear that the badger was better known and more highly valued in the northern part of the Roman Empire: according to the fourth-century Gallic writer Marcellus Empiricus the musk of the badger (*adeps taxoninus*) was important in medicine (36.5), and the Latin term *taxo* seems to derive from a Gallic original.

Bibliography

- M. Bright, *Beasts of the Field* (London 2006).
R.W. Davies, 'The Roman military diet', *Britannia* 2 (1971), 122–42.
L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010).
C. Hünemörder, 'Badger', in H. Cancik and H. Schneider (eds), *Brill's New Pauly: encyclopaedia of the ancient world, Antiquity* vol. 2 (Leiden 2003), col. 458.
J.T. Katz, 'Aristotle's badger', in B. Holmes and K.-D. Fischer (eds), *The Frontiers of Ancient Science: essays in honor of Heinrich von Staden* (Berlin 2015) 267–88.

MOLE

The Greek term *aspalax* and Latin *talpa* both refer to a small, sightless burrowing animal, but the precise identification of the creature concerned is problematic, since the words were used of both the Mediterranean mole (*Talpa caeca*), an insectivore, and the greater mole-rat (*Spalax leucodon*), a rodent. Both mole and mole-rat fill the same ecological niche, so it is understandable that they were treated as the same animal; the Mediterranean mole, however, is found only rarely in mainland Greece and not at all in the islands or further south or east, while mole-rats are not found in Italy and the West. Certain features can indicate which is meant by a particular source: Aelian, for instance, describes the *spalax* among animals with projecting teeth (*NA* XI.37), certainly a reference to the mole-rat, while Virgil's description of the *talpa* which undermines the threshing floor (*Georg.* I.183) is probably of the mole. Seneca refers to both (*talpae et subterranei mures*, moles and underground mice) at *QN* III.16. Artistic depictions, which might help resolve the question, are unfortunately non-existent. It is likely that there was some confusion between the species in antiquity: Pliny, though an Italian, claims at *HN* VIII.226 to have seen bedspreads made of the skins of *talpae*, which are more likely to be the furry mole-rat than the smooth mole.

Whatever their actual species, moles were popularly proverbial for their lack of sight (e.g. *Cic. Acad.* II.25.81), but were otherwise little considered outside the agricultural writers. Only Oppian, who includes them among small creatures not worth hunting in his *Cynegetica*, dignifies them with a mythological link to the legend of Phineus (*II*.612–28).

1. The intriguing mole

Pliny Natural History X.191, XXX.19–20

Moles hear more acutely than humans – even though they are buried in the earth, the most dense and deadening of elements, and even though sound naturally travels upwards, moles can hear human speech, and they are even said to understand if people are speaking about them, whereupon they run away.

It is a particular mark of the folly of the beliefs held by the Magi that of all animals they hold the mole in the greatest admiration, even though it has been cursed by nature in so many ways: in its perpetual blindness, living always in darkness underground, like a dead person. The Magi believe that no other entrails have such power in divination, that no other animal is more effective in religious rites, and if a man eats the heart of a mole, still fresh and beating, he gains the power to divine and foretell future events. They swear that a tooth taken from a living mole and used as an amulet cures toothache; their other beliefs about this animal we will mention in the appropriate place. The most accurate

of their beliefs is that moles can cure the bite of the shrew, since (as I noted above) even earth from a rut made by the wheel of a cart is an antidote for this.

COMMENT: Even today moles and mole-rats remain mysterious creatures: living their entire lives underground, their habits are difficult to observe and as Pliny himself notes, they are extremely shy of humans. His dismissal of Eastern magical beliefs about the mole shows that this limited understanding could have two different consequences: either one followed the Magi in interpreting moles as supernatural creatures, far removed from the everyday, or one saw them as deficient and lowly creatures in their lack of normal abilities and habits. Scientific writers from Aristotle onward commented on moles' vestigial eyes, covered by a membrane (*HA* 491b 28–35, 533a 3–12), and Pliny, while acknowledging their acute sense of hearing, found it hard to explain how they managed to breathe underground (*IX*.17). It is a testimony to the lack of knowledge about them that while other tunnelling animals were extravagantly praised in antiquity for the complexity of their constructions (see *ANT* no. 6), mole tunnels are not mentioned in the same context, though Aristotle does list them among animals which build houses for themselves (*HA* 488a 21).

2. Moles as agricultural pests

Palladius 4.9.4

To deter moles in the field of artichokes it is useful to have cats; many people have tamed weasels. Another deterrent is to fill the moles' tunnels with red ochre and the juice of the wild cucumber. Sometimes farmers dig holes next to the moles' nests, so they flee in terror at the admission of sunlight. And many place snares made from coarse hair at the entrance of their tunnels.

Geoponica 13.7

Moles (from Paxamus):

If you wish to kill moles, make cakes of white hellebore and the bark of dog's-bane, chopped and sieved, together with barley-meal and eggs, steeped in wine and milk, and put it into the moles' tunnels. Or you can make holes in a narrow pot or any other vessel of this kind, and fill it with chaff, cedar oil and sulphur; at the place where the mole nests, block up the smaller tunnels to prevent the smoke escaping through them, and place the bottom of the pot into the largest hole, so the air is drawn in through it, seal up the hole in some way and blow the air through, so that all the stench of cedar and sulphur is carried by the smoke down into the hole and suffocates the mole. Go around and do the same at every mole nest, and you will kill them all.

COMMENT: Moles are frequently mentioned as pests by agricultural writers: Palladius here sees them as a particular threat to artichokes, while Columella says that they can damage the roots of chestnut trees along with mice (*De re rust.* IV.33), and both Varro and Virgil refer to moles undermining the threshing-floor (*De re rust.* I.51; *Georg.* I.183). Once again it is not always clear whether the mole or mole-rat is meant. Moles are carnivores, feeding on invertebrates, and thus pose no direct threat to vegetable crops, though their tunnelling can be a disturbance. Mole-rats, on the other hand, are herbivores and may therefore be the concern in Palladius' work. D'Arcy Thompson (1918) suggests that one can make a distinction on the basis of the writer's location,

Greek sources (including the *Geoponica*) referring to mole-rats and Italian (including Palladius) to moles, but this overlooks the circumstances in which agricultural treatises were written: much existing knowledge and advice was taken over by each writer from his predecessors, almost all depending ultimately on the works of the Carthaginian agriculturalists such as Mago (see Col. *De agri.* XII.4.2; Dalby 2011: 36–49). It is thus possible that most advice about moles and ways to combat them came originally from an African or Hellenistic Greek tradition, and was referring to mole-rats.

Bibliography

- A. Dalby, *Geoponica (Farm Work)* (Totnes 2011).
W. D'Arcy Thompson, 'The "mole" in antiquity', *Classical Review* 32 (1918), 9–12.
K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).

HARE/RABBIT

Rabbits and hares are small herbivorous mammals of the *Leporidae* family. Rabbits tend to live in groups and, generally, like to make homes in underground warrens whereas hares are more solitary and nest above ground. Both have long ears, designed for detecting predators with radar accuracy, and powerful hind legs which allow them to run fast and jump high to avoid capture. Rabbits are most active at dawn and dusk, while the hare is more nocturnal – which helps explain its association with the moon in many world cultures (Dickenson 2014). Rabbits are far more familiar to modern people because they are now so widespread, but in ancient times the hare predominated across Europe, with the European rabbit found only in Iberia and the South of France. Thus rabbits were unknown in Egypt and the Near East – the 'coney' of the King James Bible at Leviticus 11.7 in fact refers to the rock hyrax – but four subspecies of hare were known to the ancient Egyptians, and two to the ancient Near East. Greek writers knew only the brown hare (*Lepus europaeus*), of which they distinguished two kinds, mainland and island (see no.1 below), but Roman writers knew of two hare species, the brown hare and the Alpine hare (*Lepus timidus*); Varro (*De re rust.* III.12.6) says that the latter is entirely white, but Pliny (*Nat. Hist.* VIII.217) notes that its colour changes from red in summer to white in winter. Alpine hares counted as rarities – Pliny claims that they lived on snow in the winter – and are occasionally noted as exhibits in the arena (Calp. Sic. *Ecl.* VII.58).

Hares were thus common animals of wild and cultivated land, and fulfilled many roles – hunted game animal, pet and sacred creature. What is known of these animals from Near Eastern sources, however, tends to be purely pragmatic. The Hebrew bible, for instance, prohibits the eating of hares (Leviticus 11.6; Deuteronomy 14.7), probably because of their digestion methods (Borowski 1998: 192–3): after eating large quantities of fresh greens, the animal excretes partially digested food in the form of pellets and eats it again (the process – 'refection' – can be repeated several times).

For the Greeks, the hare was the archetypal prey animal, timid, fast and fertile; Herodotus was the first to use it to illustrate the balance of nature (III.108), explaining that because the hare is prey to both other animals and humans, it is very prolific, whereas predators such as lions reproduce very slowly. In Greece they were hunted as game, but the Romans introduced the farming of hares in *leporaria* (warrens); Varro (III.12.1–4) describes as part of his ideal villa a wooded enclosure in which hares could breed, and probably for this reason Pliny describes the hare as a

semi-domesticated animal (VIII.220). In larger *vivaria* they could still be hunted, but Varro also describes intensive fattening in cages: the Ostia shop relief (MONKEY no. 3) shows at the bottom right live hares in cages awaiting purchase. The very frequent motif in Roman mosaics of the hare nibbling a bunch of grapes or figs seems to belong to both the genre of kitchen still life, and that of idyllic rural life (Bouvier 2000: 117–20, 140–1; Toynbee 2013: fig. 105).

Leporids in Roman mosaics and other forms of art are often misidentified as rabbits, but the spread of the rabbit from its place of origin in Iberia was slow: see no. 4 below. Thus Greek art depicts only hares, and identifiable rabbits are very rare in Roman art (see further no. 7 below).

1. Captured hares

Fragment of a wall-painting from the tomb of User, Thebes, XVIII Dynasty



COMMENT: This miniature masterpiece of Egyptian art depicts estate workers in the employ of the nobleman User bringing produce including two hares (the Brown or Cape Hare; Egyptian *sh'ṯ*) from the fields and to the offering table. The hares are very carefully observed, the artist carefully recreating the distinct streaked stripe of their coat and their long ears, the most distinctive feature of the animal (Parkinson 2008). There is little doubt that hares formed part of the Egyptian diet: they are represented being killed on the hunt by arrows or, more commonly, by dogs (Osborn and Osbornova 1998: 42–5). The hare-hunt is actually a very old motif and is first encountered in Egyptian art on the so-called Hunters' Palette from the Late Predynastic period (Osborn and Osbornova 1998: 3).

In the Middle Kingdom, faience figurines of hares were deposited in tombs (Houlihan 1996: 70), although the precise meaning of these is oblique; perhaps they were simply deposited as substitute food offerings, to provide sustenance for the tomb-owner in the afterlife, or maybe they were symbols of fertility – an obvious connection, given the hare's extreme fertility. The hare played only a modest role in Egyptian mythology. It appears once in the Pyramid Texts as a term of abuse, but it was championed by one goddess, Wenut ('the Swift One'), a deity from Hermopolis in Middle Egypt who, in the Greco-Roman period, received bronze hares as votive offerings.

2. Jackal and hare

Egyptian Aramaic text in Demotic script (Amherst Egyptian 63; section XV.1213)

Jackal, jackal!
Here, in front of you is a hare!
Moon-howler, jackal!
Rove, go out and look!
Rove away from my wilds!
Hare!
Here, a hunter
is hunting you assiduously,
with skilful hands.

COMMENT: This poetic extract comes from a long text written on both sides of a twelve-foot-long papyrus (Amherst Egyptian 63), originally joined by a few fragments which are now at the University of Michigan (Michigan-Amherst 43b). Much of the text records the liturgy of the New Year's festival of an Aramaic-speaking community in Upper Egypt at the beginning of the third century BCE. Parts of the text include curious little vignettes of daily life or scenes from wildlife, such as this simple little poem where the narrator first addresses a jackal ('Moon-howler'), urging him to look for his prey and then turns attention to a hare, warning it that a skilled hunter is in pursuit. It is a neat word-painting of a common artistic theme.

3. Five studies of the hare

Attic pyxis lid, Brussels, Bibliothèque Royale 9, attr. Pistoxenos Painter, c. 450 BCE (after Hoppin 1919 (II): 175)



COMMENT: This ceramic lid from the mid-fifth century BCE has a delightful decoration of five hares, each in a different pose, in a sparsely evoked natural setting. The artist aims to show the animal's activities (feeding, washing, scenting the air) and characteristic postures, clearly observed from life. Images of hares pursued by hounds are quite common on pyxis lids and *askoi* (Barringer 2001: ch. 2), but the hare as a subject of interest in itself is much rarer. The side of the pyxis carries a scene of women in an interior, with fruit and flowers, and it may be that there is an implicit parallel drawn between the timid hare, well-known for its fertility, and the protected young women. Hares quite often appear with women in interior scenes (Lewis 2002: 161 and fig. 4.20), and while they may reflect the reality of pet-keeping (see PETS no. 15), they had symbolic value too.

4. Hunted hares

Xenophon On Hunting V (extracts)

The hare sits with its hind legs tucked under its flanks and its front paws usually extended side by side; it rests its chin on its front feet and lays its ears back along its shoulders, to cover its softer parts. Its fur, which is thick and soft, also serves as protection. When it is awake a hare will blink, but when asleep its eyelids remain open and motionless, and its eyes will not move. Its nostrils twitch constantly in sleep, but less when it is awake. In the spring hares frequent the fields and mountains. A hare remains where it is when being tracked, unless it is startled at night, in which case it will run away.

Hares are extremely fertile, and can be raising one litter as they give birth to the next and are pregnant with a third. Young hares leave a stronger scent than older ones, since while their limbs are still soft they trail the whole of their body along the ground. But good huntsmen leave very young hares for the goddess [i.e. Artemis]. Yearling hares are the fastest at the first chase, but less so subsequently, for they are nimble but lack stamina.

The swiftest hares are those which live in the mountains, those which live in the plains are slower, and slowest of all those which live in the marshes. Hares which wander across all types of terrain are difficult to hunt, because they know the shortest way to run. Hares run most readily uphill and on the flat, less often on uneven ground, and least of all downhill. In the chase, they are most easily seen on ploughed land, if they have a reddish colouring, and among stubble where they cast a shadow; they are also easily seen on flat paths and roads since the brightness of their coat makes them stand out. They are hard to spot when they run away to rocky ground, in the mountains and in wooded or stony country, where they are well camouflaged.

When a hare has outrun the hounds it will stop and sit up to listen for any barking or footfall of the dogs nearby, and if it hears the sound of them from anywhere close, it will turn and flee. Sometimes, even when they hear no sound, they take it into their head to spring about around and through the same places, and to double back on their tracks as they run away. Hares which are found on open ground have the greatest stamina, because they are exposed, while those found in overgrown places have less, as the dark cover hinders them.

There are two species of hare: the larger, which are darker in colour with a large white patch on the brow and spots around their tail, and the smaller, which are redder in colour with a small white patch and spots beside the tail. The large hare has a fiery eye and a long black tip to the ear, and the smaller a pale eye and smaller ear-tips. Small hares are generally found on islands, inhabited and uninhabited, and less often on the mainland, for on most islands there are no foxes to catch and eat the hares and their

young, nor are there eagles, because these are creatures of the high mountains, and in general the island peaks are too small for them. Human hunters too rarely visit the deserted islands, while the inhabited ones have few people and fewer hunters; of course on sacred islands hunting is forbidden. Thus with no predators to catch the old and young hares, they are obviously very numerous.

In the chase the hare is not often caught by the hounds because of its speed; hares are only caught in spite of their abilities because they meet some mischance. It is a fact that no other creature of similar size is as well-constructed as a hare. . . . One can see how nimble a hare is by observing how it moves when calm: it bounds – a hare is never seen to walk – bringing its hind feet around and outside its forefeet, in the same way that it runs, as its tracks in the snow demonstrate. It does not use its tail when running, because it is too short to steer the body; instead it directs its course using its ears: when the hounds are in pursuit the hare will lower the ear on the side from which the danger comes, and turn it out sideways, then wheel round on it and turn sharply, and in a flash give the pursuers the slip. So delightful is the spectacle, that anyone watching the tracking, flushing, pursuit and capture of a hare would forget any other pleasure.

Arrian On Hunting XVI

The strongest hares make their forms in places which are open to view and exposed; because they are bold they do not conceal themselves, but seem, I think, to challenge the hounds. When hares of this kind are pursued, they do not fly to the woods or groves, even if these happen to be close by, so as to easily escape the danger; no, they make for open country, pitting themselves against the hounds. If the hare has slower dogs on its trail, it matches its speed to that of its pursuers, whereas if swift hounds are in chase, it runs at full speed. A hare which has made for open country, if it realises that it is being pursued by a swift hound, close on its heels, will twist and turn back on itself, and turning about make for the woods or any other hiding-place it can find, and this should be taken as proof that the hound has bested the hare: for those who are truly knowledgeable about hunting do not urge the hounds on to catch the quarry, but take pleasure in the contest and struggle of the hunt. They are pleased if the hare manages to get away, and if it dashes into thin cover among the thorns and can be seen trembling and exhausted, they call off the hounds, especially if the chase has been a worthy one. It has often happened that I myself, following the hunt on horseback, have arrived to find the hare caught, and have captured it alive; then after calling back the hounds and leashing them, I set the hare free again. And on occasions when I have come up too late to save a hare, I have been seized with remorse that the dogs have lost such a worthy opponent. This is the only point on which I disagree with my namesake Xenophon, for while I agree that a man might find the sight of the chase so absorbing as to drive all other pleasures from his mind, I do not consider the death of the hare to be a pleasant or remarkable spectacle, but rather a disagreeable one, and not such as to surpass any other pursuit. But it is understandable that Xenophon, in his time, should have thought the capture of the hare a great spectacle, since he had no knowledge of swift hounds.

COMMENT: Xenophon and Arrian both wrote on the theory and practice of hare-hunting, five centuries apart, and they illustrate changes in cultural attitudes towards the practice. Xenophon devotes the major part of his *Cynegetika* to hare-hunting, which in his time was carried out on

foot, with hounds driving hares into pre-laid nets; he considered it an occupation most suitable for young men. Greek literature is full of anecdotes about chasing hares, such as the story of the Spartan boys saved from a collapsing building when they spotted a hare and all ran out to chase it (Plut. *Cim.* 16.5). In the fourth century when Xenophon was writing the aim of the hunt was to bring home the hare as game for consumption: many Greek pots show the huntsman returning with a hare suspended from a stick over his shoulder (Schnapp 1989: figs 104–7). The second-century CE Arrian, on the other hand, represents a later perspective, in which hunting is a leisure activity rather than for practical purposes, and the idea of ‘sport’ has appeared. Wealthy Romans employed huntsmen to provide game for eating (see BADGER no. 1); hunting was thus a pastime, and Arrian dwells on the interest of the contest between hare and hounds, watched by the hunter from horseback. He anthropomorphises the hare as a willing participant in the entertainment, and suggests that the aim need not be the death of the hare, explicitly challenging Xenophon’s view that the capture of the hare was a worthy sight. By this period the hare was too lowly a quarry to justify such excitement: Romans valued the more challenging wild boar far more highly (see PIG no. 6).

5. An invasion of hares on Astypalaea

Hegesander of Delphi fr. 42 (= Athen. Deipnosophistai 400d)

Hegesander of Delphi says in his *Memoranda* that during the reign of Antigonus Gonatas, such a multitude of hares bred on Astypalaea that the inhabitants were forced to consult the Delphic oracle for advice. The Pythia advised them to rear dogs to hunt the hares; and in a single year more than six thousand were caught. Astypalaea became so overrun because a man from Anaphe had introduced two hares to the island; this was an act of revenge because sometime previously one of the Astypalaeans had introduced two partridges to Anaphe, and the partridges bred in such great numbers there that the inhabitants were in danger of having to abandon their homes. Originally there were no hares on Astypalaea, only partridges.

COMMENT: Hegesander’s story (preserved by Athenaios) is one of a number of tales about animals overrunning human communities: Aelian speaks of invasions of insects (*NA* XI.28) and rodents (XVII.17; see also MOUSE nos 6 and 7); the tale of the rashly introduced hare, however, seems to have been one of the oldest. ‘The man from Carpathos who introduced the hare to his own island’ was proverbial, and Aristotle explains it as referring to someone who hopes to benefit by an action, but in fact finds it harmful (*Rhet.* 1413a 15–17). The proverb appears in a fragment of Archilochus (227) from the seventh century, showing that the idea of hares multiplying uncontrollably in a landscape free from predators was familiar to all. Island communities could be particularly fragile (see GOAT no. 14) and Xenophon comments (above) that on an island hares are safe from foxes and eagles as well as human hunters. As Bodson (1978) notes, Astypalaea lies not far from Carpathos in the Dodecanese.

6. Rabbits

Strabo Geography III.2.6

[In Turdetania] there is an amazing abundance of domestic animals of all kinds, and of game, but there are hardly any harmful animals apart from the small hares which burrow

in the earth, which some call 'leberides'. These destroy trees and plants by gnawing the roots; they are found almost everywhere in Iberia, as far up as Massalia, and are particularly numerous on the islands. It is said that the inhabitants of Gymnasia once sent a deputation to Rome to ask for a new place to live, because they had been driven out by these creatures and could find no remedy because of their vast numbers.

[For the continuation of this passage, see WEASEL no. 3, on the use of ferrets to control rabbit populations.]

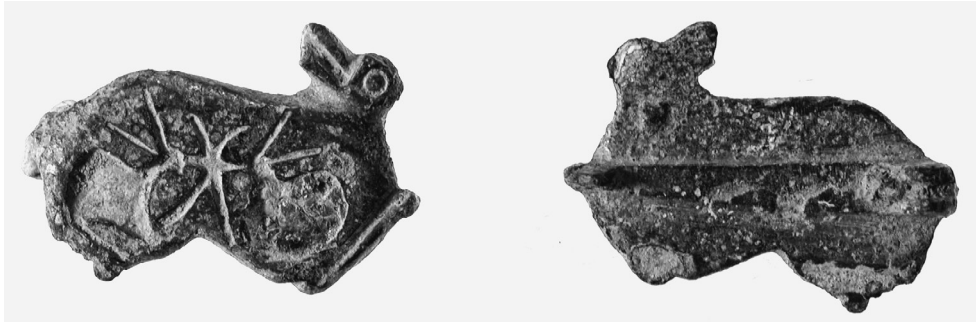
COMMENT: Polybius' brief reference to rabbits in Corsica at XII. 3.10 is famously the first reference in classical literature to the rabbit as distinct from the hare, and Strabo, in his discussion of Iberia, describes them in more detail a generation later. The hare was indigenous across the Mediterranean, but the rabbit was found only in Spain, Southern France and the Balearic Islands, and both authors felt the need to describe this unfamiliar animal to their audience. '*Cuniculosa*', 'abounding in rabbits', even appears as an epithet of Iberia in Catullus' poems (37.18). Once the rabbit became known to the Romans it was gradually introduced to Italy as a food animal: the first-century Varro recommends that rabbits should be included in the *leporarium* (hare enclosure) (*De re rust.* III.12. 6–7), although King suggests that literary sources may in this case be deceptive, as the zooarchaeological evidence from Pompeii indicates that rabbits were still very unusual there in 79 CE (King 2001: 436–7). That rabbits spread across Europe under the Roman empire is often assumed, but in fact evidence for this is poor: Sykes and Curl (2010) present the evidence of rabbit remains in Roman Britain, and conclude that the occasional finds of bones indicate small numbers of animals imported from Gaul, with perhaps local attempts at breeding, but no successful introduction; rabbits did not become established in Britain until the twelfth century CE, a pattern replicated elsewhere in Northern Europe.

7. Hares and rabbits in Roman Britain

a) Romano-British bronze and enamel fibula, London, British Museum 1866.1203.143, from Lincoln, second–third century CE. © The Trustees of the British Museum



**b) Gallo-Roman copper alloy fibula, Portable Antiquities
Scheme SF-D91D84, from Gedgrave, Suffolk, second century CE
(image licensed by PAS under CC-BY)**



COMMENT: These two Romano-Celtic brooches depict opposite, a hare and above, a rabbit, and illustrate very neatly the differing beliefs about the two animals. Zoomorphic designs of many forms are common among Romano-Celtic brooches, and vary significantly between different areas of the Roman empire, reflecting cultural differences. The enamelled brooch in the form of a hare is of Romano-British manufacture, from the second century CE, and hares are the most numerous wild mammal depicted in brooches from Roman Britain; they are shown running or leaping and have decoration with spots or enamelled cells in different colours (Hattatt 1987: 240). Hare brooches are more common in Britain than in mainland Europe, perhaps reflecting the persistence of the religious meaning of the hare in Celtic tradition (Crummy 2013). The second brooch, on the other hand, is part of a local production from Roman Gaul in the first century BCE, at the Cote d'Or: this is a 'silvered' brooch in the form of a rabbit sitting at rest. Many examples are decorated with inlaid stripes of niello, but the example here is a variant in which the body of the rabbit contains two incise panels, each containing the figure of a smaller rabbit. These were undoubtedly made to represent a distinctive local creature, and draw attention to the rabbit's well-known fertility (Hattatt 1987: 241). The designs illustrate clearly the differing views of the animals – the wild and agile British hare and the fertile and domesticated rabbit of Gaul.

Bibliography

- J. Barringer, *The Hunt in Ancient Greece* (Baltimore 2001).
 L. Bodson, 'L'expansion des léporidés dans la Méditerranée classique', *Les naturalistes belges* 59 (1978), 66–81.
 L. Bodson, 'Motivations for pet-keeping in ancient Greece and Rome. A preliminary survey', in A. Podberscek et al. (eds), *Companion Animals and Us. Exploring the Relationships between People and Pets* (Cambridge 2000), 27–41.
 O. Borowski, *Every Living Thing. Daily Use of Animals in Ancient Israel* (London 1998).
 M. Bouvier, *Le lièvre dans l'antiquité* (Lyon 2000).
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 N. Crummy, 'Attitudes to the hare in town and country', in H. Eckardt and S. Rippon (eds), *Living and Working in the Roman World: essays in honour of Michael Fulford on his 65th birthday* (JRA Suppl. 95) (Portsmouth, RI 2013), 111–27.
 V. Dickenson, *Rabbit* (London 2014).
 R. Hattatt, *Brooches of Antiquity* (Oxford 1987).
 J.C. Hoppin, *A Handbook of Attic Red-Figured Vases: signed by or attributed to the various masters of the sixth and fifth centuries B.C.* (Cambridge, MA 1919).
 P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).

- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
- S. Lewis, *The Athenian Woman: an iconographic handbook* (London 2002).
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- R. Parkinson, *The Painted Tomb-Chapel of Nebamun: masterpieces of ancient Egyptian art in the British Museum* (London 2008).
- A. Schnapp, 'Eros the hunter', in C. Berard et al., *City of Images: iconography and society in ancient Greece* (tr. D. Lyons) (Princeton 1989), 71–87.
- N. Sykes and J. Curl, 'The rabbit', in T. O'Connor and N. Sykes, *Extinctions and Invasions: a social history of British fauna* (Oxford 2010), 116–26.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).

HEDGEHOG

With their stubby legs, short tail, pig-like snout and thick coat of spines, hedgehogs are unmistakable in appearance. They are primarily insectivores, feeding on beetles and other invertebrate animals (though they will also eat frogs and even small rodents), and are quite common although, being nocturnal and shy, they are not often seen. Three species of hedgehog were found in the ancient Mediterranean: the European, and in Egypt and the Near East the long-eared desert hedgehog (*Hemiechinus auritus*), which lives a nocturnal and solitary existence, and the desert hedgehog (*Paraechinus deserti*), a bigger variety of its long-eared cousin. Bones of this hedgehog have been found among other human refuse at Merimde in Upper Egypt, suggesting that the Egyptians ate this animal (see below) and it is this species that was depicted in Egyptian hunting scenes. Hedgehogs make only rare appearances in Near Eastern sources, and the Hebrew bible has only one (spurious and contested) reference to this timid animal (Isaiah 34:11).

The hedgehog was a familiar and even domestic creature for the Greeks and Romans, providing both proverbial phrases ('one could as easily make the prickly hedgehog smooth', Arist. *Peace* 1086) and the well-known observation of Archilochus (fr. 201) on its defensive habits. In general they were considered clever animals, with a range of tricks and abilities, although Ion of Chios (Athen. 91d–e) disparaged the hedgehog's purely passive approach to conflict. As an animal which lived underground and was most often seen at night, the hedgehog had connections with the chthonic realm, and is often depicted in Greek art near tombs or as a creature of ill-omen (Calder 2011: 75; Buchholz 1965). They were not commonly eaten in Greece, but Pliny (*NH* XXX.65) says that they are good to eat if killed with a single blow.

1. Hedgehogs hunting

Line drawing taken from the tomb of Ptahhotep at Saqqara, Dynasty V (after Evans 2010: 127)



COMMENT: There are several surviving scenes of hedgehogs emerging out of, or retiring into, their burrows, represented in this representative scene in a typically stylised manner (hares and jerboas are shown in a similar way; Osborn and Osbornova 1998: 21). The front hedgehog, emerging from the burrow, is shown holding a scorpion, grasshopper or locust in its mouth. With a pig-like snuffling (hence 'hog'), the hedgehog is skilled at rooting out prey from grass, leaves, scrub and earth. The diet of hedgehogs does consist mainly of invertebrates, but they will feed on small vertebrates and eggs, and after capture, its prey tends to be immobilised and killed when the hedgehog locks its jaws together and crushes its victim. While it is difficult to tell if it is the desert or long-eared hedgehog depicted here, the general accuracy of the artist's observation is very good and as is typical of Egyptian artists, the observation of this hunting scene, probably a nocturnal event, is very accurate indeed (Evans 2010: 124–5). When food is scarce, hedgehogs retreat into underground dens for long periods, only to re-emerge in times of abundance. The Egyptians associated this behaviour with rebirth and hedgehogs easily became symbols of resurrection.

It was the ability of the animal to curl into a ball (see New York, Metropolitan Museum of Art 1989.281.91) and then emerge from it after sleep or the threat of danger had passed, which perhaps encouraged the Egyptians to associate the animal with rebirth and from the Middle Kingdom the hedgehog featured on scaraboid amulets and later in the famous *aryballoi* which feature in many Egyptian tombs and seem to have been exported throughout the Mediterranean World (see Webb 1978 and below).

It has long been thought that while nearly every species of animal in Egypt was at some point associated with a deity, only the horse and the hedgehog were not afforded this honour. However, there is evidence that the hedgehog was a symbol for the goddess Iusaâs/Âbâs of the Bahariya Oasis (Osborn and Osbornova 1998: 23). The hedgehog certainly had a solar and apotropaic significance (shown by appearance on prows of solar barques), and was regarded as a protective creature as it attacks 'bad' animals such as snakes and scorpions (von Droste zu Hülshoff 1980: 46; Osborn and Osbornova 1998: 22). Its ability to survive the desert also added to its protective qualities. Hedgehogs may have been used as offerings in the season of *peret* as a symbol of resurrection or as a means of protecting the sun god.

2. Hedgehogs in medicine

Ebers Medical Papyrus, early XVIII Dynasty (after von Droste zu Hülshoff 1980)

Spine of a hedgehog, warm, mix in oil, apply . . . Another (remedy) for hair growth due to *nssq*-illness: hair of the porcupine, it shall be boiled in water, the head shall be anointed therewith for four days.

COMMENT: Hedgehog spines, when ground up and mixed with fat or oil, cured baldness: Old Kingdom and Middle Kingdom scenes sometimes show captive hedgehogs being transported in cages having been taken in hunting expeditions alongside other small game, such as hares (Metropolitan Museum of Art 33.8.15). Hedgehogs were commonly included in lists of offerings to the dead, presumably because of their solar and underworld associations, but the eating of hedgehogs cannot be ruled out (Houlihan 1996: 69). Besides this, the usefulness of hedgehogs in magico-medical recipes may have led to their widespread capture, and even possibly for domestic breeding purposes. The boiled-up flesh of a hedgehog produced grease which was used to cure everything from ear-ache to fever, while dried hedgehog skins could be burned and inhaled as an aid for headaches and colds (Osborn and Osbornova 1998: 22–3).

3. Aryballos (perfume-bottle) in the shape of a hedgehog

Rhodian aryballos, New York Metropolitan Museum of Art 69.11.3, mid-sixth century CE (Purchase, Winslow Carlton Gift, 1969). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: This little perfume-bottle (7 x 11 x 6 cm) was made in Rhodes in the sixth century and formed part of a large-scale trade in Eastern perfumes in the archaic period. Aryballoi can take the form of many different objects or animals, but the hedgehog form was a very popular one, and examples are found across the Mediterranean. One reason for the popularity of the form is undoubtedly its suitability for the pot of this kind, with a large swelling body and small face and feet, inviting a textured decoration: the example here carefully shows both spines and the light fur on the face, while other examples have patterned bodies. Hedgehog vases of different types are found in several Mediterranean cultures: a small group of Mycenaean hedgehog vases dating from the late Bronze Age has been identified (Rystedt 1987: 28), with a suggestion that they were used in cult practice, and Rystedt also identifies a seventh-century Boiotian Geometric hedgehog vase (34–5). The East Greek and Corinthian producers of aryballoi were strongly influenced by Egyptian models, making hedgehog aryballoi in both clay and faience in large numbers: the faience vases, directly imitating Egyptian types, tend to depict the long-eared hedgehog, while examples in clay are modelled on the European species (Webb 1978: 132–4).

4. Hedgehogs predict the weather

Aristotle Historia Animalium 612b 4–10

And as for the abilities of the hedgehog, it has been noted in many places that when the wind is about to change from North to South, or vice versa, hedgehogs which live under the ground change the hole which leads to their burrow, and those which are kept in houses change their wall: their perception is such that a man in Byzantium, so it is said, gained a reputation for forecasting the weather from observing his hedgehog acting in this way.

COMMENT: Aristotle's short discussion of the hedgehog is surprisingly informative: its implication in distinguishing those that live under the ground from those that are kept in houses is that domesticated hedgehogs were common in Greece, not as pets but as useful predators of beetles and other household pests. That the hedgehog was considered a household animal is also suggested by the existence of toy rattles in the form of hedgehogs, similar to those of pigs (Thompson 1954: 80–1). The idea that hedgehog habits could predict the weather similarly implies a close observation of their activities. Aristotle's claim that at a change of wind the hedgehog 'changes its hole' is expanded by Theophrastus (*Weather Signs* 2.30), who explains that a hedgehog burrow has two entrances, one to the north and the other to the south, and when the wind blows from one quarter, the hedgehog closes up the corresponding entrance. A violent storm is predicted when the hedgehog closes up both entrances. Aristotle has clearly adapted this wisdom for the domestic hedgehog, declaring that it too changes the house wall beneath which it shelters when the wind changes.

5. The hedgehog in the vineyard

Greek Anthology VI.45 (Anonymous)

Having caught the hedgehog, bristling with sharp spines,
The grape-gatherer, thief of the sweet vineyard,
Curled up and rolling on the grapes to steal them,
Comaulos hung it up alive as an offering to Bromios.

COMMENT: This epigram, and the similar VI.169, refer to the ancient conviction that hedgehogs would steal fruit, especially grapes and figs, by rolling on them to fix the fruit on their spines and carrying it away on their backs – Pliny (below) describes the same with apples. Plutarch (*Mor.* 971f) adds the detail that the hedgehog shakes the vines with its feet to make the fruit fall, then picks it up and goes away 'like a walking bunch of grapes'. A fourth-century terracotta hedgehog, found in a well in the Athenian Agora, was identified by Thompson (1954) as an illustration of this tale: the hedgehog figure is covered with rounded clay knobs, which she takes to represent figs. As a picturesque idea it had a long life, and she traces similar representations among Roman terracottas and into the medieval period.

The two epigrams are perhaps not as 'charming' as Thompson suggests: the hedgehog here is hung up alive to die (echoing Pliny's recommendation below), while in the other poem it has been killed and dried before being dedicated as an offering to Dionysus, reflecting instead vengeance on predators of his harvest.

6. How hedgehogs defend themselves

Pliny Natural History VIII.133–5

Hedgehogs too lay up stores of food for the winter, picking up fallen apples on their spines by rolling on them, and holding one more in their mouth, they carry them off to hollow trees. These same creatures predict a change in the wind from north to south by hiding themselves in their nests. When they feel threatened they pull in their head and feet and all the lower part of their body, which is covered with a thin and harmless down, and roll up into a ball so that the only part of them which can be touched is their spines. When they are in real danger they urinate over themselves, because their urine is corrosive to their skin and damaging to their spines, for they know that these are the reasons they are hunted. Therefore the skill is to catch them just after they have voided their urine. Under these circumstances their skin has great value, but otherwise it is corroded and weak with the spines rotted and falling out, even if the hedgehog manages to flee and lives. They therefore do not cover themselves in this harmful fluid except in the greatest danger, since even they hate their own poison, sparing themselves and waiting until the very last moment, with the result that in general they are overtaken by capture. Once caught, they will unroll when sprinkled with hot water and are hung up by one of their back feet to starve to death; this is the only way to kill them while preserving the skin. The hedgehog is not, as many say, useless to humans, for if it did not have spines the softness of fleece would have been given to mortals in vain: cloth is smoothed with hedgehog skin. In this case too fraud has found great opportunity through monopoly, and on no other subject have there been so many decrees of the senate, and every emperor has been approached with complaints from the provincials.

COMMENT: Pliny's account of the hedgehog repeats most of the tales from the Greek tradition, but concentrates for the most part on the utility of hedgehog skins, which played a significant part in the preparation of woollen cloth: the final process of manufacturing involved raising the nap of the cloth with an abrasive brush, and Roman fullers used either thorny plants such as thistle heads, or a board covered with hedgehog skin (Moeller 1976: 22). Pliny is preoccupied with the preservation of the spiny skin when hunting the hedgehog, and strikingly says that attempts to create a monopoly of hedgehog pelts had led to many complaints to successive emperors. A very late edict of the Byzantine emperor Zeno from 483 CE has been seen by some as relating to such a monopoly (*Cod. Just.* 4.59): the law forbids the creation of monopolies of cloth, fish, shellfish or *echinus*, or any other commodity. In the context the word could refer either to the terrestrial hedgehog or the spiny sea-urchin, also called *echinus*.

Elsewhere in the *Natural History* Pliny makes frequent reference to the 'dried flesh of the hedgehog' as a medicine, citing it as a treatment for brain-fever, dropsy, spasms and obstruction of the bladder (XXX.65, 95, 105, 110), implying that his advice to dry the animal for the preservation of the skin was a widespread practice. Hedgehog gall is also recommended as a treatment for hair-removal, warts and vitiligo (XIX.116, 30. 81, 121).

Bibliography

- H.-G. Buchholz, 'Echinos und Hystrix; Igel und Stachelschwein in Frühzeit und Antike', *Berliner Jahrbuch* 5 (1965), 66–92.
L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals 600–300 BC* (Oxford 2011).
L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010).

- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
W. O. Moeller, *The Wool Trade of Ancient Pompeii* (Leiden 1976).
D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
E. Rystedt, 'Vases in the shape of hedgehogs – Mycenaean and later', *Medelhavsmuseet Bulletin* 22 (1987), 28–39.
D.B. Thompson, 'Three centuries of Hellenistic terracottas', *Hesperia* 23 (1954), 72–107.
V. von Droste zu Hülshoff, *Der Igel im alten Ägypten* (Hildesheim 1980).
V. Webb, *Archaic Greek Faience: miniature scent bottles and related objects from East Greece, 650–500 BC* (Warminster 1978).

MONGOOSE

The mongoose probably entered into Iran and Mesopotamia from the Indus Valley, perhaps via the Persian Gulf. The Indian grey mongoose (*Herpestes edwardsi*) is certainly attested in archaeological remains at Qalat al-Bahrain dating to the early first millennium BCE, where it must have been introduced by humans. A mongoose skull of uncertain date was discovered at Ur and an Ur III text records the payment of 4.3 shekels for the creation of a mongoose statuette as a royal gift (Potts 1997: 262). The mongoose must have been a relatively familiar sight in Mesopotamia given that the goddess Ningilin shares her name with the animal (Potts 1997: 263), and the popular appearance of the mongoose in Near Eastern proverbial texts demonstrates human familiarity with the animal and its ways.

The Egyptian mongoose or *ichneumon* (the so-called 'Pharaoh's rat'; see Cooney 1965) belongs to the family of the *Herpestidae* whose members have non-retractable claws. It was much loved by the Egyptians for its ability to kill cobras and rats. With a body length of up to sixty centimetres and a weight of up to four kilos it is somewhat larger than the Indian mongoose and could be found as far north as Spain and Portugal and as far east as Israel and Palestine. The mongoose appears frequently in Egyptian art, although it can be confused by the artist with the shrew, weasel, otter and genet (Osborn and Osbornova 1998: 83–92; Evans 2010b). As a successful hunting carnivore it is often shown raiding birds' nests for their eggs or else clambering through papyrus thickets on the prowl for snakes, small rodents and invertebrates. Its larger victims are killed by a crushing bite delivered to the skull. Two Old Kingdom scenes show mongooses being held by their tails as men lower them into the waters of the Nile, suggesting that tame mongooses could have been used to flush out birds from papyrus thickets during the hunt (Evans 2010a: 118–20).

The Egyptian mongoose was well known to classical authors, and accounts of it focus on just one thing: the combat between mongoose and cobra. The story is common in both literature and art, but beyond this mentions of the mongoose are few. Its role as a sacred animal in Egypt was recognised, and some writers take an interest in its reproductive habits; Aristotle (*HA* 580a 23–4) comments that mongooses reproduce in the same way as dogs, whereas Aelian (*NA* X.47) makes the more startling claim that all mongooses are hermaphrodite, and fight before mating to determine which will be male and which female. An intriguing epigram of Martial includes the mongoose in a list of exotic pets at Rome (VII.87.5), though the description given to it, *pernicius ichneumon* (the destructive mongoose), hardly encourages one to believe that they were often chosen as a pet.

1. A mongoose is what a mongoose does

a) Sumerian proverb (after Alster 1997 (1): 227)

A cat for its thinking,
A mongoose for its action.

b) Sumerian proverb (after Alster 1997 (1): 308)

A mouse fell down from the roof.
A mongoose approached it.
'What! Where did you hurt yourself?'
'You, don't come near.
In what way are you comparable to me?'

c) Babylonian proverb (after Lambert 1960)

A mongoose, to [get away from] a dog entered a drain pipe.
When the dog jumped in it [got wedged]
And so let the mongoose escape.

d) Akkadian proverb (after Bodenheimer 1960: 92–3)

A mouse is fleeing before a mongoose and enters a snake hole, with the words:
'The snake-charmer has sent me! Peace be with you!'

e) Akkadian proverb (after Parpola and Reade 1993 (I): 25)

If a mongoose passes between the legs of a man, the hand of a god or the hand of a king will seize him.

f) Sumerian proverbs (after Alster 1997 (1): 189, 264; Chavalas 2013: 67)

My mongoose, which ate redolent food, does not even stretch towards a jar of ghee.

My mongoose, which used to
eat strong-smelling food, can no
longer stretch its neck toward a
jar of fine oil. . .

If bread is left over,
the mongoose eats it.

g) Akkadian text, Vassal Treaty of Esarhaddon 71

Just as a snake and a mongoose do not enter
the same hole and do not live there, but plot of cutting
each other's throats, so may you and your women not
enter the same house, (not lie down in the same bed)
but plot of cutting each other's throats.

COMMENT: Mongooses feature regularly in Near Eastern proverbs and satires (see also MOUSE no. 1) where they often provide comic relief and caustic humour. The word ‘mongoose’ (Akkadian, *ši-ku-ku-tu*) might also have served as a euphemism for human body parts such as the nose, arm or finger (Chavalas 2013: 72 n. 69). The mongoose was a propitious animal (see 1e) and the proverbs provide accurate observations on the life and habits of the mongoose as well as its role in human society. Some of the proverbs focus on the mongoose’s uniqueness – in spite of its physical similarity to cats and to rodents, a mongoose is very much its own animal. One Sumerian tale, *He is a Good Seed of a Dog*, even notes the mongoose’s similarities to the dog, although, the author states, it is ultimately distinguished from canines by ‘having the stench of a mongoose’ (Sjöberg 1972: 110).

The natural antagonism between snakes and mongooses was well known and frequently recorded. One of the earliest attestations of mankind’s fascination with the mongoose-serpent enmity comes from Egypt and dates to the pre-Dynastic (Naqada II) period: several Egyptian mongooses, with long tails and splayed claws, hunt snakes in a pack formation (Houlihan 1996: 123). The royal Assyrian ritual text (g) (c. 680–69 BCE) curses the harem of a nobleman, wishing antagonism and disharmony among his wives by employing an effective mongoose-snake image (Aynard 1972: 64).

The Mesopotamian proverbs cited here provide early evidence for the training of mongooses by snake-charmers (a practice still in operation in India) who used the animals to control disobedient cobras. There is little doubt that mongooses were kept by Egyptian households as ‘ratters’ and snake-catchers, and while they do not appear to have been thoroughly domesticated, mongooses could be trained to keep vermin and snakes at bay. A few Egyptian wall paintings show men leading mongooses on leashes, suggesting a ‘professional’ occupation of mongoose-handlers, rat-catchers or snake charmers (Osborn and Osbornova 1998: 94).

2. Mongoose worshipping the sun

***Bronze staff-decoration, Egypt, Late Period, c. 600 BCE
(London, British Museum EA29601)***



COMMENT: This hollow-cast copper alloy staff-fitting in the form of an ichneumon shows the animal seated on haunches on top of a lotus flower; its forepaws are raised in attitude of prayer and its tail curves round its right side. The mongoose's thick fur is indicated by small incised strokes. The mongoose wears a sun disk and uraeus on its head, alluding to the fact that in the Late Period the Egyptian mongoose enjoyed a sacred status. Many bronze mongooses are known from the period 800–400 BCE; the votive figures are usually hollow and often contain the bone remains of real mongooses, suggesting that after death, the animals were interred within the statuettes and buried in the confines of temples and sanctuaries. Thousands of such mongoose remains have been discovered at the sanctuary at Bubastis (Tell Basta), interred alongside domestic cats in a vast mixed animal cemetery.

In the Late Period the mongoose often shared its semi-divine status with the unrelated giant musk shrew (*Crocidura flavescens*) or, bizarrely, the dwarf shrew (*Crocidura nana*) which measures only a few inches in length. The mongoose is a diurnal mammal, while the shrew is strictly nocturnal, and so the Egyptians developed the idea that when the sun set each night, the mongoose shrank and remained in a diminutive size until the dawn when it took on its usual proportions (Aynard 1972: 60). In its two aspects, the mongoose-shrew was sacred to Horus-Mekhentienirty, 'the blind and seeing god' of Letopolis in Lower Egypt; moreover, the mongoose had close associations with the Heliopolitan god Atum and the goddess Wajet of Buto and therefore sports the solar disk on its head. In some versions of the myth of Re the sun-god takes on the form of a mongoose (as opposed to the more commonly depicted cat) in order to fight the demonic serpent Apophis (Houlihan 1996: 127).

3. The mongoose and the cobra

Aelian On the Nature Animals III.22

The battle between the asp and the ichneumon, two Egyptian animals . . . The ichneumon does not approach the contest with its adversary without consideration or in a hasty way, but like a man putting on armour it rolls itself in the mud and coats itself all over so that it has a hard defensive covering. If there happens to be no mud available, it washes itself in the water and then rolls about while still wet in deep sand, finding in this a means of defence in a difficult situation; and it goes off to battle. The tip of its nose, however, is tender and exposed to the bite of the asp, and it guards it in the following way: by bending its tail upwards and fending off the attack with it. And if the asp manages to strike the ichneumon's nose, it kills its opponent, but if not, it strikes its fangs against the mud vainly, and eventually the ichneumon, making a sudden spring, seizes the snake's neck and strangles it. Whichever is the first to strike wins the contest.

COMMENT: The battle between the mongoose and the cobra, here in its canonical form, was a popular subject of ancient literature (Plin. *NH* VII.98; Ar. *HA* 612a 16–20) and art: it appears in both the Nile Mosaic of Palestrina and that of the House of the Faun at Pompeii (illustrated at *HIPPOTAMUS* no. 9; Mielsch 1986: 752). Meyboom (1995: 243) notes that representations of the mongoose usually reflect the description here of the animal protecting its nose with its tail, unnatural though this posture is. The mongoose is also said to be an enemy of the crocodile: Pliny (*NH* VIII.90) claims that it waits for the crocodile to open its mouth when asleep, then leaps down its throat and gnaws its belly from the inside. Aelian (*NA* VIII.25) repeats this story, while Plutarch seems to conflate the two, saying that the mongoose armours itself with mud before attacking the crocodile (*Mor.* 966d, 980e). In all cases, however, the essential point is the

mongoose's intelligence, as it prepares itself for battle 'like an athlete' and exploits its opponent's weaknesses.

The 'enmity' between the mongoose and cobra is part of a common theme of natural friendships and enmities projected onto the animal kingdom (e.g. Ar HA 608b 19–610a 35); in reality, Egyptian mongooses do tackle poisonous snakes which make up part of their diet, although the story that they armour themselves with mud is fanciful.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
 J.M. Aynard, 'Animals in Mesopotamia', in A. Houghton Brodrick (ed.), *Animals in Archaeology* (London 1972), 42–68.
 E.S. Bodenheimer, *Animal and Man in Bible Lands* (Leiden 1960).
 M.W. Chavalas (ed.), *Women in the Ancient Near East* (London 2013).
 J.D. Cooney, 'Pharaoh's rat', *The Bulletin of the Cleveland Museum of Art* 52.8 (1965), 101–5.
 L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010a).
 L. Evans, 'Otter or mongoose? Chewing over the evidence in wall scenes', in A. Woods, A. McFarlane and S. Binder (eds), *Egyptian Culture and Society: studies in honour of Naguib Kanawati vol. 1* (Cairo 2010b), 119–29.
 P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960).
 P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
 H. Mielsch, 'Hellenistische Tieranekdoten in der römischen Kunst', *Archäologischer Anzeiger* 101 (1986), 747–63.
 D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
 S. Parpola and J. Reade, *Letters from Assyrian and Babylonian Scholars* (2 vols) (Helsinki 1993).
 D.T. Potts, *Mesopotamian Civilization: the material foundations* (Ithaca 1997).
 A. Sjöberg, "'He is a Good Seed of a Dog" and "Engardu, the Fool"', *Journal of Cuneiform Studies* 24 (1972), 107–17.
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).

RAT

While the term 'rat' is widely applied to rodents, members of the genus *Rattus*, the true rats, are native only to southeast Asia, Australia and the Pacific islands; the two common European species, the black rat (*Rattus rattus*) and brown rat (*Rattus norvegicus*) are incomers. Generally distinguished from mice by their larger size, rats are co-operative and colonial, and as omnivores they have proved able to survive and flourish in urban areas where they feed on detritus left by humans. Consequently rats were often seen as a menace, blamed for damaging food supplies and property or for spreading disease (MacDonald 2010: 190–9; O'Connor 2013: 89–97).

The spread of rats in antiquity is difficult to trace: Old World rats from the forests of southeast Asia spread to Europe after the Ice Age, but exact dates are hard to establish as bones are so rarely found. Literary sources offer little help, since few ancient texts care to differentiate between rats, mice and other forms of rodent thus making it problematic to decide exactly what animal is being referred to in any given source (see MOUSE). Nevertheless, as the evidence here shows, the black rat was spread by humans across the Near East, and adapted to urban living: it was found in Egypt in dynastic times, together with the Nile rat (*Arvicantis niloticus*) which frequented canals and riverbanks. The brown rat, most common today, spread from China at a much later date in the Middle Ages. Rats were never a major food resource in the ancient world, but in some eras and some locations they do appear to have been exploited as part of the diet (below no. 1).

There are no classical sources for the black rat, because it was not present in ancient Greece and was very scarce in Roman Italy; neither Latin nor Greek have a word for 'rat', *rattus* being a medieval formation. Their spread across the Roman empire via the port at Alexandria was both slow and patchy: rats are sedentary creatures, rarely travelling more than 200 metres from their original colony, and while archaeozoology has recently begun to detect Roman-period rat colonies in Western Europe, most of these occur within 10 km of sea or river ports, suggesting that dispersal by ship was the primary mode (Sallares 1991: 263–4; McCormick 2003: 11). McCormick suggests further that rats may have spread as a consequence of the Roman centralised grain supply network, and that by Late Antiquity they occupied cities in significant numbers (2003: 16–17). Strikingly, though, black rats appear to have died out again in Europe in the Middle Ages, not reappearing until the twelfth century CE, when they spread from the North.

One or two classical passages have been interpreted as referring to the rat: Aelian describes very large *mues* (mice) in the Caspian territory which swim across rivers in a chain and eat crops, fruit and even trees – he says that their teeth can cut iron (NA XVII.17), and Aristotle (HA 600a 13–15) refers to the 'Pontic *mus*', which is white, though this is more probably an ermine. It is noteworthy, though, that both place these odd *mues* in distant north-eastern regions.

1. Vermin and scapegoat

Hebrew bible, Leviticus 11.29

Of the animals that move along the ground, these are unclean for you: the weasel, the rat, any kind of . . . lizard.

Isaiah 66.17

Those who consecrate and purify themselves to go into the gardens, following one who is among those who eat the flesh of pigs, rats and other unclean things – they will meet their end together with the one they follow.

1 Samuel 6.4–5, 11, 18

The Philistines asked, 'What guilt offering should we send to him?' The (priests of Dagon) replied, 'Five gold tumours and five gold rats, according to the number of the Philistine rulers, because the same plague has struck both you and your rulers. Make models of the tumours and of the rats that are destroying the country, and give glory to Israel's god. Perhaps he will lift his hand from you and your gods and your land. . . ' They placed the Ark of the Lord on the cart and along with it the chest containing the gold rats and the models of the tumours . . . And the number of the gold rats was according to the number of Philistine towns belonging to the five rulers—the fortified towns with their country villages. The large rock on which the Levites set the ark of the Lord is a witness to this day in the field of Joshua of Beth Shemesh.

COMMENT: The Hebrew word *akbar* or *akhbar* ('corn eater') is a broad term that can be used to refer to many types of rodents encountered in the Near East, including field mice, voles, shrews, gerbils, jerboas and rats (see MOUSE). Therefore the dietary law against the eating of 'rats' encountered in Deuteronomy should be taken as referring to all rodents. It is possible that this prohibition was concocted as a reaction to the common practice of eating rats, mice and other

rodents (including hamsters) among the Israelites' neighbours. That the prophet Isaiah should rail against the abomination of eating rats and pigs and other unclean animals suggests that not all Israelites observed the dietary regulations and that they were difficult to police (see PIG).

The passage from 1 Samuel deals with an episode wherein the Philistines, the enemies of the Israelites, prepare to send the captured Ark of the Covenant back to its rightful owners and, as means of reparation, the Philistine priests recommend that its return is accompanied by golden statuettes of five tumours (or haemorrhoids) and five rats (or mice in some translations; Chisholm 2013: 38–42). These are reparation (or 'guilt') offerings of great monetary and symbolic value; the tumours and the rats mirror the disease with which the Philistines have been blighted (1 Samuel 5. 4–5) and the objects act as scapegoats to draw off the disease and to appease Yahweh (Numbers 21. 8–9). It is possible that rats had been the carriers of the bubonic plague which had contaminated the Philistine cities, raising tumours on the bodies of the sufferers (Klein 2008: 57; Bright 2006: 197; see Firth 2009: 98 for an alternative reading, replacing rats with harvest-destroying mice).

The rat-images serve an apotropaic function, for the making and sending-off of rodent images, commonly found in the Near East, was a form of sympathetic magic with the intention of dispelling disease or disaster (see Leviticus 16.22). The Hittite Ambazzi ritual (ii: 37–40) is another example of this in which the practitioner attaches a rat or a mouse to a bow-string, as a symbol of the pollution, and recites an incantation: 'I have taken away from you evil and I have put it on the rat/mouse. Let this rat/mouse take it to the mountains, the deep valleys and the distant ways!' (Tsumura 2001: 367).

2. Rat trap

***Egyptian terracotta trap from Lahun, late Middle Kingdom,
c. 1850–1700 BCE (London, Petrie Museum 16773).
Photograph courtesy of The Petrie Museum***



COMMENT: This baked clay box was found at the Middle Egyptian site of the town of Lahun by Sir Flinders Petrie who originally thought it to be some kind of coop, pierced with air holes, and fitted with a sliding door. Clearly intended for retaining animals alive, Petrie thought it was a hatching oven for chicks, so that, when the chicks came out 'they might not stray about, and could be carried away in the warm pottery cage without chilling'. Today, scholarly opinion believes it to be a rat trap (Drummond, Janssen and Janssen 1990). Unlike rodent traps attested in classical sources (see MOUSE no. 6), which were intended to crush and kill victims, this trap seems to have served the function of keeping its prisoner alive, although it is probable that the

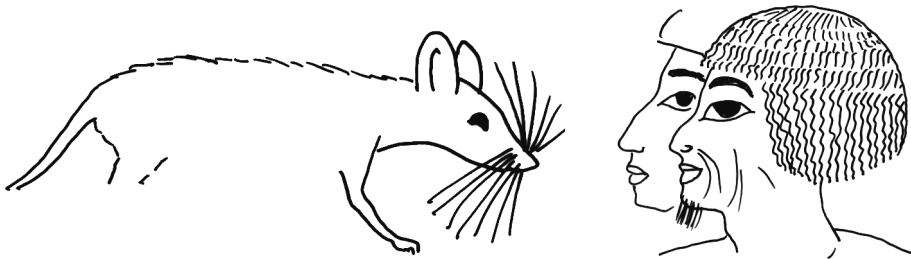
trap was baited with poison so that the rat was killed. In this the Egyptian rat-trap resembles, in form and function, examples found in Mesopotamia and Iran (Simpson 1993). The Egyptians could be very superstitious about rats, which were regarded as unlucky. An omen text (n. 4) from the XIX Dynasty Papyrus Sallier thus records:

1st month of Peret, day 12: Inauspicious! Inauspicious! Inauspicious! You should not see any rat on this day. You should not go near it in your house. This day, on which one wards off all matters of Sekhmet [goddess of plague and warfare] on this day.

Plenty of archaeological evidence for rat activity exists from the pharaonic period, including much structural damage to houses. Petrie's excavations at Lahun suggested that, 'rats were [a] great plague in the XII Dynasty . . . Nearly every room [in the town's houses] had its corners tunnelled by rats; and the holes were stuffed up with stones and rubbish to keep them back' (Osborn and Osbornova 1998: 48). This might help explain the presence of rat traps found in the archaeology.

3. Senenmut, the dirty rat

XVIII Dynasty ostrakon from Thebes, co-regency of Hatshepsut and Thutmose III, c. 1479–1458 BCE (New York, Metropolitan Museum of Art 31.4.2)



COMMENT: Scholars are united in identifying the man represented twice on this limestone flake as Senenmut, the Chief Steward of Queen Hatshepsut. This important courtier held the highest offices of state during the queen's reign and was even the tutor of her one surviving child, Princess Nefereure. The prominence of Senenmut in the sources, coupled with the fact that he was provided with an impressive tomb close to Hatshepsut's own, has led some scholars to suggest that Senenmut was the queen's lover. Several scurrilous images of Senenmut survive in support of this idea; he was frequently the victim of artists' defamatory attacks. This particular ostrakon contains another image on its reverse: 'an admirable drawing in black ink of a lean, hairy rat with prodigiously long whiskers' (Hayes 1959: II 110), suggesting that the image of a rat had a satirical intent when coupled with a portrait of Hatshepsut's much-vilified courtier – with his straggly whisker-like beard (Roehrig 2006: 120–1).

Bibliography

- P.L. Armitage, 'Unwelcome companions: ancient rats reviewed', *Antiquity* 68 (1994), 231–40.
 M. Bright, *Beasts of the Field. The Revealing Natural History of Animals in the Bible* (London 2006).
 E. Chaline, *Fifty Animals that Changed the Course of History* (Newton Abbot 2011).
 R.B. Chisholm, *1 & 2 Samuel* (Grand Rapids 2013).
 D.C. Drummond, R.M. Janssen and J.J. Janssen, 'An ancient Egyptian rat trap', *Mitteilungen des Deutschen Archäologischen Instituts Kairo* 46 (1990), 91–8.
 D.G. Firth, *1 & 2 Samuel* (Nottingham 2009).
 W.C. Hayes, *The Scepter of Egypt*. II vols (New York 1959).
 R.W. Klein, *1 Samuel* (Nashville 2008).
 D.W. MacDonald (ed.), *The Encyclopaedia of Mammals* (Oxford 2010).
 M. McCormick, 'Rats, communications and plague: towards an ecological history', *Journal of Interdisciplinary History* 34 (2003), 1–25.
 T. O'Connor, *Animals as Neighbors. The Past and Present of Commensal Species* (East Lansing 2013).
 D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
 C.H. Roehrig (ed.), *Hatshepsut. From Queen to Pharaoh* (New Haven 2006).
 R. Sallares, *The Ecology of the Ancient Greek World* (Ithaca, NY 1991).
 S.J. Simpson, 'Mouse traps in Mesopotamia', *Orient-Express* 1 (1993), 18–20.
 D.T. Tsumura, 'List and narrative in 1 Samuel 6, 17–18a in the light of Ugaritic economic texts', *Zeitschrift für die alttestamentliche Wissenschaft* 113 (2001), 353–69.

MOUSE

Mice were a constant presence in ancient houses, temples and farms, in both city and countryside: the house mouse, which is not native to Europe, but spread from East or North-East Asia during the Bronze Age (Sallares 1991: 21; O'Connor 2013: 81–9), found an extremely effective niche as human commensal and agricultural parasite. House mice could be found in every building, great or small: the expensive trompe-l'œil mosaic floor by Heraclitus in Rome depicting the 'unswept floor' motif of scraps from a banquet includes at one edge a tiny mouse nibbling a walnut (Toynbee 2013: fig. 101), while Cicero remarks in a letter to Atticus that the shops he owns have become so unsafe that not only the residents, but even the mice have left (XIV.9.1; cf. Pliny *NH* VIII.103). Probably because of its ubiquity, the mouse was the object of equal exasperation and affection: it could be used as a term either of abuse (Petr. *Sat.* 58) or endearment (Martial *Ep.* XI.29.3), was trapped and hunted as a pest, but also worshipped in some places, and forms a very common subject of playful art (Toynbee 2013: 203–4, figs. 99–100) and stories. The tale of the town mouse and the country mouse originated in antiquity, told by Babylonian teachers and pupils, Horace (*Sat.* II.6.80–115), and by Aesop (Perry 352), as did the story of the mouse that comes to the aid of the lion (Perry 150; West 1969; see LION no. 9), and the mock-heroic *Battle of the Mice and the Frogs*.

Many other species of mice were recognised as particular pests: the field-mouse and wood mouse which attacked growing crops, and the shrew-mouse (*sorex*) whose bite was believed to be harmful to domestic animals (Columella *De Agri.* VI.17.1, 4–6). That dormice were eaten as a delicacy at Rome is one of the most memorable facts about ancient diet today: Varro (*RR* III.15.1–2) briefly describes an enclosure for raising dormice, and the jars (*gliraria*) in which they were fattened (illustrated in Daremberg and Saglio s.v. *glirarium*): the purpose of these seems to have been to mimic the conditions of hibernation, since ancient writers state that dormice grow fat over the winter (e.g. Mart. *Ep.* XIII.59), presumably referring to their putting on fat in preparation for hibernation. Ammianus Marcellinus, describing extremes of ostentatious luxury in the fourth century CE, refers to the serving of extra-large dormice at a banquet, complete with scales on which they could be weighed (XXIV.8.13). Eating mice, gerbils and even hamsters was a standard

practice in the ancient Near East well before the Romans found a taste for rodents. In spite of the strict dietary regulations imposed on Israelite society, the ancient Hebrews clearly enjoyed eating mice, rats and other rodents even though they were considered unclean (see RAT no. 1).

1. Mouse proverbs

Akkadian and Babylonian proverbs (after Bodenheimer 1960: 92–3; Lambert 1996: 217)

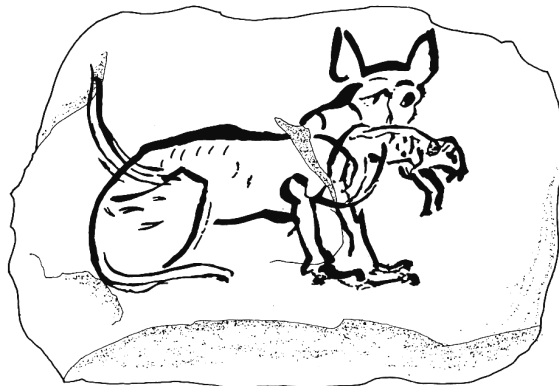
A lusty mouse which in . . .[. . .]
To the mongoose [. . .].

A mouse living in the country meets a town mouse,
It abuses the starlings which feed on fruit.

COMMENT: Mice make frequent appearances in Near Eastern proverbs, sayings, jokes and riddles; they are often characterised as plucky and courageous, always willing to take a risk. In the proverbs cited here, the mouse, encountering a mongoose is lustful, bold and intrepid, and, in the presence of ample food, he is greedy – all in all, the mouse is a charismatic comic character. The Babylonian reference to the country mouse and the town mouse is among the earliest citations of a popular folk motif made famous by Aesop (Perry 352). It is, however, difficult to be precise about the type of mice referred to in Near Eastern texts. In the Hebrew bible, for instance, the term *akbar* or *akhbar* is used for a wide variety of small rodents, including jerboas, hamsters and rats – some twenty-three species of small rodents are native to modern Israel and Palestine alone. Of course, the mouse, in spite of its literary charm, was also regarded as a pest and a threat to human livelihood, and the Israelites classified it accordingly as unclean and prohibited the eating of all mice and rodents (Leviticus 11. 29; Isaiah 66.17).

2. Cat and mouse

Ostracon from Deir el-Medina, Thebes, Egyptian XIX Dynasty, c. 1292–1189 BCE (after Osborn and Osbornova 1998: 46 and Janssen and Janssen 1989: 18)



COMMENT: Cats were frequently kept in Egyptian homes for the purpose of catching mice and rats. This vivid ink-sketch shows a domestic cat proudly holding its kill in its jaws: the mouse's carcass dangles limply. It is unclear what species of mouse or rat the artist has depicted here, which is typical of Egyptian sources dealing with small rodents; the Egyptian language did not differentiate between 'mouse' and 'rat' (Egyptian *pmw*, see also RAT no. 3). Two species of mouse are known to have existed in Egypt in antiquity, the Egyptian spiny mouse (*Acomys cahirius*) and the house mouse (*Mus musculus*) and it is possibly the latter which is depicted here, although a rat cannot be ruled out.

Such scenes are, remarkably, quite rare but the earliest known 'Tom and Jerry'-type scenario occurs in a small vignette from the tomb of Baket III at Beni Hasan (c. 1950 BCE) which depicts a cat confronting a mouse or rat (Malek 1993: 49 fig. 26). In the imaginary sphere of comic illustrations the theme of a War of Cats and Mice is frequently depicted, and the representations are numerous enough to suggest that literary versions of the theme (like the Greek *Batrachomyomachia*, 'The Battle of the Frogs and the Mice', which parodies the *Iliad*) must have existed too. Certainly the subject was also common in the Near East.

The Egyptians had had little tolerance for the pests which plagued them and tried to prevent mice from causing damage by employing traps (see RAT no. 2) and cats to catch them. The frustration of having harvested crops destroyed by mice (and donkeys) is given voice in the *Instruction of Ankhsheshonq*: 'The frogs praise Hapi, the mice eat the emmer; the oxen harvest the barley and emmer, the donkeys eat it' (Lichtheim 1980: 177). Although the *Book of the Dead* (33) calls the mouse 'the abomination of Re', the Egyptians nonetheless accepted mice as a valid part of the gods' creation and thus a hymn to Amun (c. 1600 BCE) praises the god 'who creates that on which the mosquito lives, worms and fleas likewise, who looks after the mice in their holes and keeps alive the beetles in every timber'.

Mice were also eaten: bones of both species of mice have been recovered from the stomachs of mummies and textual references to the eating of mice occur with some regularity and, like the Romans, the Egyptians might have force-fed mice on raisins, nuts and seeds in order to fatten them (Ikram 1994: 33). 'Mouse-oil' is a popular ingredient in the magico-medical papyri of the Pharaonic and Greco-Roman periods, especially in the treatment of rheumatoid arthritis. To cure baldness, the Hearst Medical Papyrus recommends the following: 'Cooked mouse put in fat until it is rotten: do likewise (i.e. anoint the scalp with the mixture)'. To cure a child of dribbling the prescription notes: 'Make this child, or his mother, eat a cooked mouse. Put the bones upon his [the child's] neck, bound with a string in which seven knots have been tied' (Dawson 1924: 84; Dawson 1930: 103–5).

3. Why mice live in holes in the ground

New Kingdom Egyptian fable (after Brunner-Traut 2000)

His Majesty the king began to look among his courtiers whom he could choose as his new vizier. But no one pleased him, and there was nobody whom he could ask for advice . . . Pharaoh was almost despairing, [when] a tiny mouse came running and whispered into the king's ear: '[Give me] the office of vizier.' Pharaoh raised his head, praised the little mouse and appointed him to be his vizier. The mouse was solemnly inducted into its new office . . . But the mouse was given to violent fits of anger. He got excited and there was the danger that in his ire he would exceed the measure of punishment. He was especially touchy when the charge was theft. Thus, one day he had a Nubian child violently beaten . . . for having pinched a few dates. The guilty child raised his arms and begged for mercy. But the mouse remained pitiless . . . When the

pharaoh heard this tale he was angered like a panther from Upper Egypt. He would not suffer a hothead in his realm. . . He immediately dismissed his vizier from office, quite ignominiously. And this did not satisfy him: he felt such revulsion towards the mouse that he did not want to see him nor any of his kind ever more. Therefore he proclaimed loudly: 'From this hour onward, all mice shall disappear from the fields and shall live underground only!' Thus the king spoke and thus it happened. This is the reason why mice live in subterranean holes to this day.

COMMENT: As in Mesopotamia, the mouse was a popular character in Egyptian folk tales, proverbs and jokes. This lively little story draws on the familiar image of the mouse as an arrogant, cock-sure character, here overstepping his reach (and his size) by becoming vizier. His abuse of his authoritative position sees his humiliation and his relegation to a home beneath the soil. The story perhaps reflects an Egyptian belief that mice were spontaneous products of the earth, born from the Nile mud, an idea preserved by Pliny (*NH* IX.84): 'when the river withdraws its covering, mice are found created from water and earth – they are already alive in a part of their body, but the most recently formed part of their structure is still made of earth' (see also Diod. I.10). As a product of 'primordial ooze' (Morgan 1999: 149), mice reminded the Egyptians of the story of Osiris, the resurrected god re-born from the Nile's inundation and, with his rich green or black skin, a living embodiment of the life-giving mud of the sacred river.

4. Mice save Egypt from an Assyrian invasion

Herodotus, Histories II.141

There came to the throne a priest of Hephaistos, whose name was Sethos. This man, they said, neglected and held in no regard the warrior class of the Egyptians, considering that he would have no need of them; and besides other slights which he put upon them, he also took from them the yokes of corn-land which had been given to them as a special gift in the reigns of the former kings, twelve yokes to each man. After this, Sennacherib king of the Arabians and of the Assyrians marched with a great host against Egypt. Then the warriors of the Egyptians refused to come to the rescue, and the priest, being driven into a strait, entered into the sanctuary of the temple and bewailed to the image of the god the danger which was impending over him; and as he was thus lamenting, sleep came upon him, and it seemed to him in his vision that the god came and stood by him and encouraged him, saying that he should suffer no evil if he went forth to meet the army of the Arabians; for he himself would send him helpers. Trusting in these things seen in sleep, he took with him, they said, those of the Egyptians who were willing to follow him, and encamped in Pelusion, for by this way the invasion came: and not one of the warrior class followed him, but shop-keepers and artisans and men of the market. Then after they came, there swarmed by night upon their enemies mice of the fields, and ate up their quivers and their bows, and even the handles of their shields, so that on the next day they fled, and being without defence of arms great numbers fell. And at the present time this king stands in the temple of Hephaistos in stone, holding upon his hand a mouse, and by letters inscribed he says these words: 'Let him who looks upon me learn to fear the gods.'

COMMENT: Herodotus merges popular Egyptian folklore, in which mice play central roles, with a historical account of Sennacherib of Assyria's assault on Egypt in 701 BCE; it is an example

of the 'triumph of the weak' motif in common story-telling in which, in this case, little mice fend off an enemy invasion (Lloyd 1993 II: 102; see also 2 Kings 19 and Isaiah 37). The statue of Hephaistos referred to by Herodotus probably relates to a cult image of the Egyptian god Horus-Mekhentienirty of Letopolis, a deity whose cultic ritual included the veneration of the shrew mouse or the dwarf shrew (see MONGOOSE no. 2); the mouse-holding statue was probably erected in Memphis as a thank-offering to the god in the face of the Assyrian rebuttal which he had brought to pass.

5. House mice

Callimachus Aetia fr. 54c

But when Molorus heard a sound,
As when a lion-cub's roar falls on the ears
Of a timid deer, he stopped his work to listen, and said softly,
'Troublesome creatures, why have you come again to be
Our neighbours, nibbling away, when you will get no benefit at all?
The god made you as a source of lamentation for hosts.'
So he spoke, and left the work he had in hand
To make a secret trap for the mice.
Into two little traps he put a poisonous bait
Of wheat-flour mixed with hellebore,
And he hid their death. . .

Often the mice had drunk the rich oil from the lamp,
Dipping it out with their tails, and when the lids were not
Placed on brine or pots, or when a lid had been pushed
From another chest, the belongings of a poor man. . .

... they had danced

On the top of his head, depriving him of sleep,
And this the ravenous creatures had achieved in one short night,
A shameful deed, which angered him the most:
They had devoured his clothes, his goatskin cloak and his leather knapsack.
For these mice he prepared two deadly traps,
A crushing-trap and a spring-trap able to catch at a distance.

COMMENT: Callimachus' *Aetia*, composed in the third century BCE, told a series of mythological stories explaining the origins of customs, names and objects, although today it survives only in fragments through finds on papyrus. This passage comes from the tale of Heracles' killing of the Nemean Lion, in the course of which the hero comes for hospitality to the house of the poor farmer Molorcos, and describes the problems caused to Molorcus by the mice which invade his house. The damage wrought by the mice is vividly invoked – they get into any container they can, eat everything even remotely edible and add insult to injury by running over Molorcus' head as he tries to sleep. The mouse in the poor man's house was a common theme of Hellenistic poetry, appearing in *Greek Anthology* VI.302, 303 and XI.391 – in the last of these the mice are berated for nibbling the speaker's scrolls. Because Molorcus prepares traps for the mice, it has been suggested that the story is an aetiology for the mousetrap, but there is no implication here that

the traps are being invented for the first time (Harder 2012: 460–2). Callimachus describes two different kinds of mousetrap, one in which a wooden weight falls on the mouse when it takes the bait, and one which catches the mouse so that it eats the poisoned bait; pitfall traps made of jars are also known from Greece (Calder 2011: 61). As well as traps, it was also common to keep household animals against mice: see WEASEL and CAT.

6. Field mice

Aristotle Historia Animalium 580b 10–581a 5

The breeding of mice is particularly remarkable among all animals both in its speed and the number of offspring produced. A pregnant mouse was once shut up in a jar of millet, and when the jar was opened again after a short time there were 120 mice inside it. It is also difficult to explain the appearance and disappearance of mice in the fields; for it often happens that a countless multitude of field mice appears, so great that little is left of the harvest. They appear so quickly that some farmers with small estates, who on the previous day decided that it was time to harvest their grain, on the following day go to the field with the reapers only to find that everything has been eaten. The disappearance of the mice is equally inexplicable: within a few days they are completely gone, and yet in the time before this they cannot be got rid of by smoking them out or uprooting the soil, or even by hunting them or using pigs to dig up their burrows. Foxes catch fieldmice, and wild weasels are good at hunting them out when they find them. But predators cannot match their prolific and rapid breeding; the only thing which works against them is the rain, when it comes: then the mice soon disappear. In a certain part of Persia, if you cut open a pregnant mouse, she will be found to have female young inside her who are themselves already pregnant. And some say with great authority that if mice lick salt, they become pregnant without mating.

Egyptian mice have a coat which is spiny and rough, like the hedgehog, and there is another kind of mouse which goes on two feet – its front legs are very short but its back legs are very long; these too breed in great numbers. And there are many other types of mouse.

COMMENT: Aristotle's discussion is testimony to the damage which mice could cause to crops, and to the lack of any serious methods to combat them. Mice are mentioned as pests of almost every stage of agriculture, eating seeds, growing crops, stored grain and milled flour (Ar. *Ach.* 762–3; Virg. *Georg.* I.181.2). They are also said to damage vineyards and orchards (Col. *Arb.* 15): Varro (*De re rust.* I.8.5) recommends that if vines are grown at ground level, one must fill the vineyard with mousetraps to protect them. Although Aristotle exaggerates mice's fecundity, they do nevertheless reproduce with great speed, gestating a litter in 20 days; the appearance and disappearance of swarms of fieldmice is, however, easily accounted for by migrations of population which move in from other areas when the crops are ripe (Sallares 1991: 77–8).

The passage is also notable for what it does not say: Aristotle comments on the Egyptian spiny mouse (*Acomys cahirinus*) and the jerboa (*Jaculus jaculus*), both of which he has evidently seen, yet he does not describe the rat, which was absent from classical Greece (see RAT).

7. Apollo Smintheus

Aelian On the Nature of Animals XII.5

The inhabitants of Hamaxitus in the Troad worship the mouse, and because of this, they say, Apollo is worshipped among them under the name Smintheus. For the Aeolians and Trojans still call a mouse 'sminthos', as Aeschylus does in his *Sisyphus*:

'But what *sminthos* of the fields is so huge?'

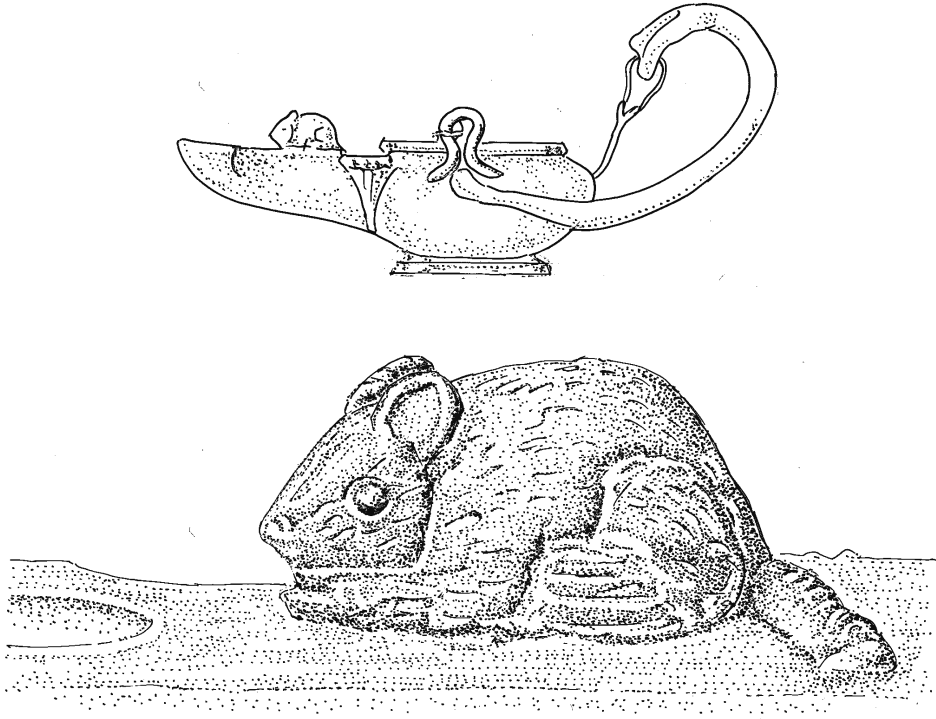
And in the temple of Apollo Smintheus tame mice are fed at public expense, and white mice nest under the altar, and beside Apollo's tripod stands [a statue of] a mouse. I have heard the following story which explains this worship: the corn-fields of the Aeolians and the Trojans were invaded by huge numbers of mice which ate the unripe corn, giving them a barren harvest. They consulted the oracle at Delphi which told them to sacrifice to Apollo Smintheus, and when they did so they put an end to the invasion of the mice and restored their usual harvest of grain. They also tell another story: some Cretans who had set out from home to found a colony as a result of some disaster asked Apollo Pythius to tell them where would be a good and fertile place to settle and found a city. They received an oracle that in the place where the earth-born made war on them, there they should settle and build their city. When they had arrived at Hamaxitus and made a camp to rest, a vast number of mice crept up on them and gnawed through the handles of their shields and the strings of their bows. They decided that these mice were the 'earth-born', and since beside they now had no means of defending themselves, they settled in that country and established a temple to Apollo Smintheus.

COMMENT: Mice did not confine themselves to houses in antiquity: they inhabited temples too, where the opportunities afforded by offerings, remnants of sacrifice and even edible dedications were great. A passage from the Hellenistic *Batrachomyomachia* (*Battle of the Mice and Frogs*) describes the mice in Athena's temple which eat not only the sacrifices and food offerings, but also the garlands, lamp oil and textile offerings (174–83). At Hamaxitus, however, the mice were not a pest but a tourist attraction: Apollo was worshipped in this region as Smintheus, the Mouse-God; his cult statues showed him with a mouse (Strabo *Geog.* XIII.1.48), and the mouse also appears on coins of the region (Graf 2009: 22–5). Aelian gives his readers two stories to explain the connection. The first is a simple tale in which the god drives out agricultural pests (see LOCUST no. 9), but in the second, while the mice are still destructive, their role is oracular. Herodotus tells a third tale in which the Pharaoh Sethos was saved from an invading Assyrian army when a swarm of mice ate their shield-handles, bowstrings and quivers overnight (above no. 5), and this last story, turning the mice from pest to ally, shows the development of the tale from its original form.

According to Pliny, to see a white mouse was considered a good omen at Rome, and one can compare with the ancient accounts the modern-day Temple of Karni Mata at Deshnoke in Rajasthan, where thousands of rats are kept and fed within the temple; the occasional albino rats seen among the population are considered to be especially lucky.

8. Mouse behaviour observed

*Bronze lamp from Pompeii, Naples Museum inv. 72172
(drawing by Tessa Rickards)*



COMMENT: This lamp, from Pompeii, is one of a large number from the ancient world with a mouse as decoration (many other Roman examples can be found in Bailey 1996). In part it reflects the ubiquity of the mouse in ancient houses, but the primary humour lies in the mouse's often-described habit of drinking the oil from lamps (see no. 5 above). Lamp-oil in Greece and Rome was usually vegetable oil, and a lamp sitting about with an open reservoir would be an invitation to mice: very often the decorative mouse on a lamp is shown approaching the spout. Roman lamp designs gradually changed to combat this, developing lids or small filling-holes to keep the mice out (Harder 2012: 453), though Callimachus' cunning mice dip the oil out with their tails (above no. 6).

The striking thing about this decoration is the close attention to detail which it shows: it would be wrong to think that mice were held in much affection in antiquity, but as close commensals of humans they would be well observed. Animals loomed large in the ancient environment, simply because the world was a less complex and cluttered place, and this artist shows an appreciation for the mouse's form and behaviour with its textured coat, rounded ears and alert pose.

9. The mice which gnaw metal

Livy XXVII.23.1

... at Cumae the mice gnawed the sacred gold in the temple of Jupiter – thus superstition introduces the gods into even the smallest of events.

Aristotle fr. 611

The inhabitants of Cleonae on the Athos peninsula are Chalcidians who were driven out from Elymnium, as the story goes, by a plague of mice which ate everything on the island, even the iron.

COMMENT: An unusual set of stories from Greece and Rome concerns mice which gnaw metal of various kinds. Among the prodigies mentioned by Livy from the pontifical annals at Rome, we occasionally find references to the mice in temples having gnawed the sacred gold (Livy XXX.2; Obs 20) or silver (Pliny *NH* VIII.222; Cic. *Div.* I.44). The latter incident, when mice gnawed the silver shields in the temple of Juno at Lanuvium, was taken to be a particularly dire portent, suggesting that it was seen to be an unnatural occurrence. Both Livy here and Cicero in *Div.* 2.27, however, dismiss the idea of mouse behaviour as a portent, saying that it is the nature of mice to gnaw things, and the act therefore has no special meaning; nevertheless they implicitly accept the idea of their gnawing gold and silver. There was also a persistent belief that in some places mice would gnaw objects of iron – Pliny (*NH* VIII.222) claims that this happens on the Cycladean island of Gyaria and among the Chalybes, while Aelian (*NA* V.14, XVII.17) says that it is true of the mice of the Caspian region – and the idea became proverbial: *ubi mures ferrum rodunt*, ‘in the place where mice gnaw iron’ (Her. III.75–6; Sen. *Ap.* 7.1). Plainly it cannot be true: mice do not gnaw metal under any circumstances. Marcovich (1977) suggests that the phrase represents an extreme of famine, when the mice have eaten everything else and turn to iron, appropriate to the Aristotelian fragment above, although Aelian compares the Caspian mice with the ferocious giant mice of Teredon whose teeth are hard enough to cut through iron – perhaps a reference to rats, which are indeed capable of chewing through metal (see RAT).

Bibliography

- D.M. Bailey, *A Catalogue of the Lamps in the British Museum vol. 4: lamps of metal and stone and lampstands* (London 1996).
- E.S. Bodenheimer, *Animal and Man in Bible Lands* (Leiden 1960).
- E. Brunner-Traut, *Tiergeschichten aus dem Pharaonenland* (Mainz 2000).
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
- C. Daremberg and E. Saglio, *Dictionnaire des Antiquités Grecques et Romaines* (Paris 1877–1919).
- W.R. Dawson, ‘The mouse in Egyptian and later medicine’, *Journal of Egyptian Archaeology* 10.2 (1924), 83–6.
- W.R. Dawson, *The Bridle of Pegasus. Studies in Magic, Mythology and Folklore* (London 1930).
- F. Graf, *Apollo* (London 2009).
- J. G. Griffiths, ‘Allegory in Greece and Egypt’, *Journal of Egyptian Archaeology* 53 (1967), 79–102.
- A. Harder, *Callimachus Aetia: introduction, text, translation and commentary* (Oxford 2012).
- S. Ikram, ‘Food for eternity. What the ancient Egyptians ate and drank. Part 1: Meat, fish, fowl’, *KMT. A Modern Journal of Ancient Egypt* 5.1 (1994), 24–33.
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- W.G. Lambert, *Babylonian Wisdom Literature* (Winona Lake 1996).
- M. Lichtheim, *Ancient Egyptian Literature. Volume III: the late period* (Berkeley 1980).
- A.B. Lloyd, *Herodotus Book II. Commentary 99–182* (Leiden 1993).

- J. Malek, *The Cat in Ancient Egypt* (London 1993).
M. Marcovich, 'Ubi mures ferrum rodunt (Seneca, *Apocolocyptosis* 7.1)', *Rheinisches Museum* 120 (1977), 85–9.
Ll. Morgan, *Patterns of Redemption in Virgil's Georgics* (Cambridge 1999).
T. O'Connor, *Animals as Neighbors. The Past and Present of Commensal Species* (East Lansing 2013).
D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
R. Sallares, *The Ecology of the Ancient Greek World* (Ithaca, NY 1991).
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
S. West, 'The Greek version of the legend of Tefnut', *Journal of Egyptian Archaeology* 55 (1969), 161–83.

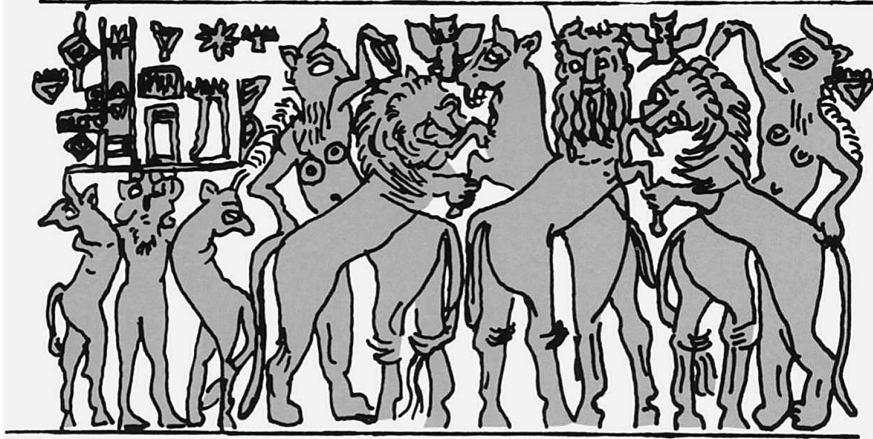
BAT

As the only mammal capable of flight, with its membranous wings and echolocation ability, the bat is one of nature's marvels. In the Western imagination it has come to occupy a unique place as 'a creature of unmitigated evil, associated with the ultimate creature of the night, the vampire' (Chaline 2011: 184), yet the bat failed to excite the ancient imagination in the same way. Bats are occasionally represented in Egyptian, Mesopotamian and Hebrew society, but without making any dent in the common cultural psyche: there were no bat-myths, bat-cults or bat-gods. Oliphant (1913) suggests that the bat may underlie the Roman folktale of the nightmarish *strix*, but it was not until the later Christian period (possibly under the influence of Jewish thought, see below no. 1) that the concept of the 'evil bat' took clear form, with leathery-winged demons and night-flying witches.

The bat's uncertain status between animal and bird was not properly resolved in antiquity: even scientific writers often considered them under the category of birds, and Arnott, following ancient practice, includes an entry on the *Nykteris* in his *Birds in the Ancient World from A to Z* (2007: 150–2), as does Houlihan's *The Birds of Ancient Egypt* (1986: 137). While many species of bat inhabited the ancient Mediterranean and Near East, all nocturnal – their names in Greek and Latin, *nykteris* and *vespertilio*, reflect this – individual species were not clearly distinguished: the only attempts are made by the unknown artist of the Beni Hasan tomb in Egypt (below no. 2) and Aristotle (*HA* 490a 7–8), who names both *nykteris* and *alopex*, 'fox', as animals with membranous wings; the latter seems to refer to a kind of large bat found in Africa (cf. Hdt. III.110; Strabo *Geog.* XVI.1.7), although precisely what kind is unclear (Arnott 2007: 13).

1. Fluttering bats

Second seal of Lugalanda. Early Dynastic III (c. 2400 BCE), found in Telloh (ancient Girsu), Iraq (Paris, Louvre AO13219; after Goldsmith and Gould 1990: 151)



COMMENT: This impression taken from a seal belonging to Lugalanda, one of the last kings of the I Dynasty of Lagash, depicts (in mirror image) a ritual combat in which the great hero-ruler Gilgamesh in quasi-leonine form and his friend Enkidu (bizarrely given a woman's breasts and hair) fight with lions. It is an odd and somewhat disturbing scene, and certainly not easy to interpret. Depicted twice, hovering above the conflict, is a bat – its face looking out at the viewer, its wings spread wide, its legs splayed apart. What role the bat performs in the narrative is unknown; perhaps its appearance indicates that the heroic conflict takes place at night.

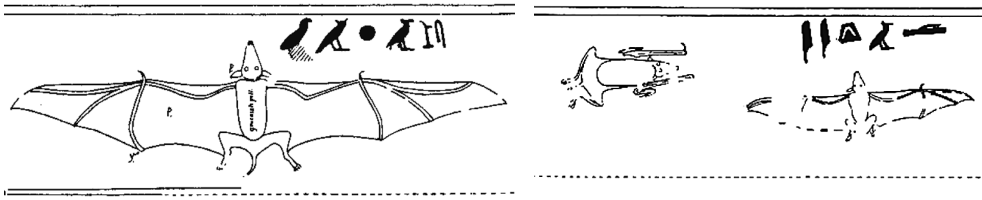
Bats were certainly a common sight across the ancient Near East. Their ability to fly automatically put them into the category of birds and thus they were known within Mesopotamia as 'birds-of-the-holes [i.e., caves]'. This is also how they were regarded by the ancient Israelites and Canaanites: in the Hebrew bible, for instance, they are listed alongside unclean birds as things that are forbidden to eat (Leviticus 11.13, 19), since all are classified as *owph* ('flying creatures'; Bright 2006: 189). In the bible the bat is named *atalef*, which appears to refer to the diminutive insect-eating bats such as the short-tailed bat (*Pipistrellus kuhlii*). These 'microbats' are completely harmless, yet in the Hebrew tradition they acquired a demonic reputation as a symbol of desolation and the end of days: 'People will flee to caves in the rocks and to holes in the ground from the fearful presence of the Lord . . . In that day people will throw away to the moles and bats their idols of silver and idols of gold, which they made to worship' (Isaiah 2.19–20; see also OWL no. 2). It is possible that the bat depicted on the Lugalanda seal should be interpreted in a similar context.

Bats figure metaphorically in early Sumerian literature. When, for example, the council of gods flee the anger and majesty of the great goddess Innana, they are said to be behaving 'like fluttering bats' (*Adoration of Innana*; Goldsmith and Gould 1990: 146). Bats appear in early Sumerian iconography too: the so-called *sutinnu* ('lion-headed eagle') made from lapis and gold and found at Mari has recently been successfully reinterpreted as a bat (Goldsmith and Gould 1990). Bats were used in Near Eastern medicine, especially for cosmetic improvements: for turning grey hair black,

an Assyrian recipe mentions taking the blood from the boiled head of a male bat and applying it to the scalp (Dawson 1930: 33; see further below). Akkadian words for ‘bat’ (*gilgidānu*, *pirurūtu*, *suttinnu*, *surinnakku*) are in fact ambiguous, having more general meanings of ‘small rodent’, ‘flying thing’ or ‘bird.’

2. The bats of Beni Hasan

Wall paintings from the tomb of Beket at Beni Hasan, Middle Egypt, XII Dynasty (after Davies 1949)



COMMENT: Bats abound in Egypt; they nest in caves, tombs and temples, and from the archaeological evidence it appears that these were the common roosts for bats throughout Egypt’s ancient past. Thousands of dried bats have been discovered in pharaonic-period tombs, having been accidentally interred inside without air and food at the time the tombs were sealed. Yet in spite of the evidence for bat habitation, there are very few representations of bats in Egyptian art. The three examples shown here come from the walls of the tomb of Beket who must have been something of a bird-fancier given that his tomb is decorated with numerous images of birds – all named and identified. That the bats are included in the wall paintings confirms that (as in the Near East) the Egyptians regarded the bat as a type of bird. Two varieties of bat are here identified by name (both written in hieroglyphic tags): the larger animal is called *sedjakhem* – the fruit bat or flying fox (*Rousettus aegyptiacus*) – while the smaller creature (one of the *Microchiroptera* or insect-eating bats) is identified by the name *dagii*. A third image shows an unspecified bat with its wings closed. While a few other representations of bats exist in line drawings, clay statuettes and even a bronze figurine (Houlihan 1996: 159; Osborn and Osbornova 1998: 28–31), the world’s only flying mammal never really captured the Egyptian imagination. There are no bat-related myths and amongst the strange creatures that guard the underworld or appear in the *Book of the Dead* (winged snakes with human legs, crocodile-hippopotamus hybrids) none take the form of bats or even adopt bat-wings or bat-ears.

3. Bat blood

Demotic spell for attraction, Ptolemaic period, c. 100–50 BCE (Papyrus Bibliothèque Nationale verso 32, 2943 q; after Dawson 1930: 36)

An infallible method of attraction: take [out] the eyes of a living bat and then release it. Then take uncooked flour or unrefined wax and fashion [out of it the model of] a little dog. Insert into its right eye the right eye of the bat and into its left eye the left eye of the bat [. . . then leave it at the crossroads] . . . If you want to bring him, then you shall succeed.

COMMENT: The bat is only encountered in Egyptian literature in magico-medical papyri. Within this corpus the spells fixate on the bat's eyes (no doubt because of its ability to 'see' in the dark). In this classic Greco-Egyptian spell for attraction (or love-spell) the bat's eyes act as surrogates in the wax (or dough) charm to give it 'second-sight' (on spells for attraction see Betz 1997 and Fararone 2001). Otherwise the bat-related medical papyri concentrate on ailments of the eyes. Sufferers of trachoma and similar diseases in which the eyelashes were extracted or were else in-growing were aided with an ointment made from frankincense, lizard's blood and bat's blood (*Ebers Papyrus* 63, 12–13). Another recipe (perhaps for glaucoma) recommends the following: 'A cut-open bat – use it as a bandage immediately until the patient is better' (*Ebers Papyrus* 63, 18). A Roman-period Egyptian spell asserts that bat's blood dropped into a man's eyes will cause blindness, although a Late Antique tradition (preserved in Coptic) confirms that bat's urine mixed with rue and fish-oil is effective in curing dimness of sight (Dawson 1930: 36).

4. Aristotle on bats

Aristophanes of Byzantium Epitome of Aristotle Historia Animalium II.436–40

Bats are sharp-toothed animals, with toed feet and wings made of skin: they have five fingers on each hand and foot, as do mice, a face like a pig, large ears, large teeth which are sharp and in two rows, and eyes which are close to their muzzle. The bat has two breasts, which produce milk. If dissected it is found to have internal organs like those of the pig. The male covers the female in a crouching position.

Bats are the only winged creatures which bear live young. The female bears pups which she suckles as she flies, holding them under her arms. Bats have two or sometimes three pups together. And the bat is said too to be covered in tiny hairs which are difficult to see, and to be the smallest creature which has fleas.

COMMENT: Aristophanes of Byzantium, a Hellenistic scholar in Alexandria, produced a much-consulted compendium of information about animals drawn from the biological works of Aristotle, including those no longer surviving; here he collects Aristotle's remarks about bats, which bear the hallmark of close investigation. As Arnott (2007: 151) suggests, the description of the face and head seems to indicate the Long-eared bat (*Plecotus auritus*), which does have a pronounced snout and prominent teeth. Among scientific writers the bat was carefully classified: Aristotle divided winged animals into those with feathered wings (birds), those with wings of skin (bats) and those with wings of membrane (insects) (*HA* 490a 6–11), and emphasised the bat's mammalian characteristics. Pliny adopted many of Aristotle's observations in his *Natural History*, but this did not prevent his including it with the birds in book X, rather than with the animals in book VIII; at XI.164 he says that no bird has teeth apart from the bat. Perhaps most striking is the indication here that bats were dissected for study of their internal organs.

5. Roosting bats

Xenophon Hellenica IV.7.5–6

On the following day, after sacrificing to Poseidon, [Agesipolis] led his army further into the territory [of the Argives]. And since Agesilaos had recently led an expedition against Argos, Agesipolis found out from the soldiers how far towards the city walls Agesilaos

had led them, and how much of their country he had devastated, and like a pentathlete tried to outdo his rival in every way. On one occasion he would not retreat from the ditches surrounding the city walls until the defenders were actually firing arrows from the towers; and another time when most of the Argives were away at the 'Laconian', Agesipolis approached so close to the city gates that the Argive gate guards closed the gates on a detachment of Boiotian cavalry which was trying to take cover inside the city, fearing that the Spartans would be able to follow them through the gates; the cavalrymen were forced to cling to the wall like bats, sheltering under the parapet, and if the Cretan archers had not happened at that point to have gone off to Nauplia, many men and horses would have been shot down.

COMMENT: In an otherwise unremarkable narrative of a Spartan expedition against Argos in 388 BCE, Xenophon's vivid metaphor perfectly describes the desperate cavalrymen trying to shelter under the parapet of the wall, and is one of a series of lively bat comparisons from antiquity. In Homer's *Odyssey*, when Odysseus is about to be sucked down into the whirlpool Charybdis he throws himself into a tree and, unable to find a foothold, clings 'like a bat' to it until his ship reappears (*Od.* XII.433), while book XXIV offers a further metaphor for the souls of the suitors, which flit and squeak like bats which have been disturbed from their roost in a cave (6–9). The comparisons thus draw on several specific aspects of bat behaviour: they roost in trees, buildings and caves; they are creatures of gloom and dark; and they make a high-pitched squeaking. This last characteristic is also noted by Herodotus, who describes the troglodytes in Ethiopia who have no language, and can only squeak like bats (IV.183).

6. The bat and the weasels

Aesop Fable 172 (Perry)

A bat which had fallen to the ground was caught by a weasel, and, fearing for her life, begged to be let go. The weasel said, 'I cannot let you go, as I am a sworn enemy to all birds', but the bat said, 'I am not a bird: I am a mouse.' And so the weasel let her go. Some time later the bat fell again and was caught by a different weasel, and likewise begged it not to eat her. This weasel also refused, saying, 'I am the enemy of all mice', and the bat said, 'I am not a mouse: I am a bat', and again the weasel let her go. And thus it happened that by changing her name on each occasion, she kept herself safe.

The moral of the story is, that we too should not always present the same face to others, reckoning that those who best adjust themselves to circumstances most often escape danger.

COMMENT: The question of whether the bat was a bird or an animal preoccupied the ancients. Aesop's story here makes a virtue of the bat's dual nature, but another similar fable (Perry 566) sees it excluded by both birds and beasts for being neither one thing nor the other. Scientific writers (above) may have examined the bat's habits and categorised it firmly as a mammal, but popular thinking was a great deal less certain. One of the most famous riddles of antiquity (Athen. 452c; Plato *Rep.* 479b–c) featured the bat as 'a bird and not a bird', and the late Roman Macrobius characterised it as '*incertae naturae*' – of indeterminate nature (*Sat.* VII.16.7). This naturally led to the bat's being considered uncanny, and hence a suitable ingredient for magic and medicine; Pliny includes bat's blood and brain as treatments for skin complaints (*NH* XXX.121, 132), but more interesting is the use of the bat as a talisman: at XIX.83 Pliny recounts the belief that a bat

carried three times around a house or sheepfold, then hung over the door upside down is protective. The *Geoponica* says that locust swarms can be deterred if one catches bats and ties them in the tops of tall trees (13.1), though this may be more practical than magical if it was thought that bats were predators of locusts and hence that the sight of them might make the swarm think twice before landing.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
H.D. Betz, *The Greek Magical Papyri in Translation, Including the Demotic Spells: texts* (Chicago 1997).
M. Bright, *Beasts of the Field* (London 2006).
E. Chaline, *Fifty Animals that Changed the Course of History* (Newton Abbot 2011).
N.M. Davies, 'Birds and bats at Beni Hasan', *Journal of Egyptian Archaeology* 35 (1949), 13–20.
W.R. Dawson, *The Bridle of Pegasus. Studies in Magic, Mythology and Folklore* (London 1930).
C.A. Faralone, *Ancient Greek Love Magic* (Harvard 2001).
N.F. Goldsmith and E. Gould, 'Sumerian bats, lion-headed eagles, and iconographic evidence for the overthrow of a female-priest hegemony', *Biblical Archaeologist* 53.3 (1990), 142–56.
P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
S.G. Oliphant, 'The story of the *strix*', *TAPA* 44 (1913), 133–49.
D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).

SEAL

The seal of the Mediterranean is the monk seal (*Monachus monachus*), today critically endangered, but in antiquity found in large numbers along coasts and often unafraid of humans. As Johnson and Lavigne note in their very detailed study of the monk seal (1999: 20–9), seals in the Mediterranean are now rarely seen on inhabited coasts, but classical sources indicate that they often congregated on shore, and Aelian records the story of a seal which became attached to a sponge-diver (*On Animals* IV.56), suggesting that they were friendly and curious animals. Because of their amphibious nature ancient knowledge about them was partial – their habits on land, basking and breeding, were quite well observed, but their activities in water remained more mysterious.

One reason for seals' lack of fear of humans was because they were not generally hunted – Oppian describes them only as a chance catch where a seal has been caught in a net while feeding on fish (*Hal.*V.376–91). Pliny, however, suggests that they were sought in small numbers in Roman times for medicinal products, and both he and Aelian claim that seals try to avoid capture by bringing up the rennet in their stomach which was so prized as a remedy (Plin. *NH* VIII.111, XXXII.112, 120, 130; Ael. *NA* III.19). Seal-skin, too, was used as an amulet against lightning strike (*NH* II.146; Suet. *Aug.* 90), though the contention that seal-skin had become a luxury item by the fourth century CE (Johnson and Lavigne 1999: 34–5) is harder to believe.

Seals appear famously in Greek art on the coins of Phocaea in Asia Minor, as a punning type on the name of the *polis* (the Greek for seal is *phōcē*), and just once on Greek pottery, on a Caeretan hydria in the Niarchos Collection, Athens, which shows a very alert seal watching among the waves as a hero fights a sea-monster (Johnson and Lavigne 1999: figs 6–7; *LIMC* *Kētos* 26). In Roman art seals are absent; the claim found in Toynbee (2013) and others that a named performing seal is depicted on the Cos arena mosaic (see PIG no. 13) is unfortunately not true: Johnson and Lavigne (1999: 4) demonstrate that this 'seal', Euploia, is in fact a bear.

1. The shepherd of the seals

Homer, Odyssey IV.398–455

So I spoke, and immediately the goddess answered: 'I will tell you exactly what to do. When the sun stands at its height at noon, then without fail old Proteus emerges from the sea where he lives, while a west wind ruffles the dark surface of the water and hides his coming; once out, he goes to rest among the rocky caverns, while around him sleep countless seals, children of the sea, hauling themselves up from the grey surf, sending forth their sharp scent of the seas' depths. I will lead you there at daybreak, you and three companions, chosen as the best among your well-made ships, and I will show the place where you can lie in ambush. But let me explain the old man's deadly wiles: first he will count the seals, then when he has accounted for them he will lie down in their midst, like a shepherd with his flock of sheep: at that point, when you see him lying down, gather your strength and courage and seize him fast, however much he struggles and strives to escape.' [. .]

As day broke I set out along the shore of the wide sea, with many entreaties to the gods, taking with me three companions, chosen as the best for whatever we might face. Meanwhile the goddess rose up from the broad bay, bringing four sealskins from the depths, all freshly flayed; and she prepared the ambush to deceive her father, hollowing out places in the sand for us to lie, and waited for us to arrive. When we reached her, she made each man lie down, and threw a skin over him, giving us a very difficult way of lying in wait, for the dreadful stench of the sea-feeding seals was a sore trial; who would choose willingly to lie down with a monster of the deep? But the goddess came to our rescue with a most welcome remedy: she placed sweet-scented ambrosia beneath each man's nostrils, to cover the stink of the seals.

We patiently lay in wait through the whole of the morning, as the seals came out of the sea in throngs and lay down one after another along the shore to sleep. At noon old Proteus emerged from the sea and found the fat seals onshore; he made his way among them and counted them all. With no suspicion of the trap laid for him, he counted us among his first group. Then he himself lay down to sleep, and we leapt up with a shout and seized him in our arms.

COMMENT: The Homeric story of Proteus, Old Man of the Sea, on the island of Pharos is the earliest classical reference to seals, and it draws on the familiar sight of seals hauled out along the coast to bask in the sun. Virgil similarly evokes seals snoring on shore in his *Georgics* (IV.432): seals need to come out on land every day to rest and to let their fur dry out, and Aelian describes them fleeing onto shore for safety when hunted by orcas (NA XV.2 = WHALE no. 4). As Trinquier (2009) demonstrates, the choice of the seal as the animal to accompany Proteus is not coincidental: seals were considered uncanny because unlike other marine mammals they moved between the depths of the sea and the land (Ar. PA 697b 1–4), and the shapeshifting Proteus, as well as 'shepherding' his seals, also displays seal-like characteristics himself as he emerges from the water at the same time every day, counts his 'harem' of seals and sleeps in their midst (Trinquier 2009: 72–4). The characterisation of seals in antiquity was not in general very positive: they were seen as malformed, noisy and smelly (Ar. MA 714b 12–14; Ael. NA IX.50; Arist. *Wasps* 1035), and elsewhere in the *Odyssey* they are considered to be man-eating (XV.480–1) – and over time their importance in the Proteus myth declined.

2. The seal and her pup

Oppian Halieutica I.686–701

The seal too cares for her young no less diligently: she also has breasts which give streams of milk. She gives birth not among the ocean's swell, but on dry land, when the time comes to relieve her womb's burden. She remains on land with her pups for twelve days, and on the thirteenth she takes the young pups in her arms and carries them down to the sea, delighting in her children and showing them their native element. Like a woman who has borne a child in a foreign land, she gladly returns to her native country and home, and carries her baby in her arms the whole day, showing him the house, his mother's home, cuddling him in unending delight; and the child looks around at everything, though he does not understand, at the hall and his parents' home; so the seal, a creature of the sea, carries her pups into the waves and shows them the wonders of the deep.

COMMENT: The seal's mammalian nature was well understood by the ancients, and accounts of the mother seal's devotion to her pups appear in Pliny (*NH* IX.41) and Aelian (*On An.* IX.9) as well as in Oppian, and it is Aristotle's account which underlies them all. Aristotle (*HA* 566b 27–567a 15) says that seals give birth on land to as many as three pups, usually in the spring; when the pups are twelve days old, the mother gradually habituates them to the water, taking them to the sea several times a day. In fact monk seals give birth to only one pup at a time, though in a colony with mothers coming and going the number of pups can be difficult to gauge, but they do indeed remain on land for about two weeks before venturing into the sea with their mother. Oppian's extended metaphor, however, dwells on the affection shown by seals towards their pups, and emphasises the dual nature of the seal, casting the land as a foreign country in comparison to its home in the sea.

3. Seals in captivity

Philostratus, Life of Apollonius of Tyana II.14.54

And if we consider sea creatures, we should not be surprised that dolphins show affection for their young, since they are noble animals, but it is more surprising to find the same feeling among whales and seals and other sea animals which bear live young; I once saw a seal at Aegae, in captivity for the arena, which had borne a pup while in her cage, and which was so grieved for its death that she refused to eat for three days, although seals are the most voracious of animals.

COMMENT: This rather sad vignette from Philostratus' *Life* of the prophet Apollonius of Tyana shows us a seal in captivity in the first century CE at Aegae in Aeolis. Making seals part of a *venatio* may not seem an obvious choice to a modern audience, familiar with the habits of seals, but the ancients viewed them as monstrous creatures, quite probably capable of eating sailors (Schneider 2001) and they are attested in shows at Rome several times under the name *vituli marini*, sea-calves. Calpurnius Siculus (*Ecl.* VII.65–6) refers to a number of seals hunted by a bear in the arena in the time of Nero, while the account of the martyrdom of Thecla, also set in the first century CE (*Acts of Paul and Thecla* 9 = LION no. 13) tells us that seals were displayed in the arena in an artificial pool, and that the crowd certainly thought that they were man-eating.

The seal that Apollonius saw, however, could perhaps have been intended for training as a performing animal: Pliny (*NH* IX.41) says that seals can be taught to respond to their names, and to bow and roar to the crowd.

Bibliography

- W.M. Johnson and D.M. Lavigne, *Monk Seals in Antiquity. The Mediterranean Monk Seal (Monachus monachus) in Ancient History and literature* (Leiden 1999).
H. Schneider, 'Thekla und die Robben', *Vigiliae Christianae* 55 (2001), 45–57.
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
J. Trinquier, 'Protée en sa grotte ou le parti pris du phoque', in A. Rolet (ed.), *Protée en trompe-l'oeil: genèse et survivances d'un mythe, d'Homère à Bouchardon* (Rennes 2009), 63–103.

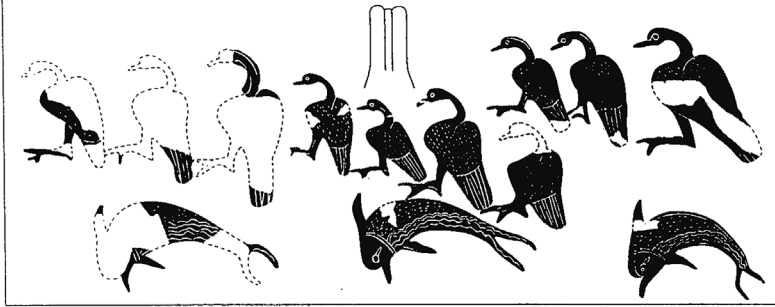
DOLPHIN

In antiquity dolphins (Gr. *delphis*, Lat. *delphinus*) were widespread in the Mediterranean, and today striped, common and bottlenose dolphins still inhabit its waters; ancient peoples did not distinguish between dolphin species, though Aristotle and Pliny mention the porpoise (*phōcaina*), which was found only in the Black Sea (Ar. *HA* 566b 10–13; Plin. *NH* IX.34; see Frantzis et al. 2001). Fast and voracious hunters, dolphins were considered to be the apex predators of the sea (Pliny *NH* IX.20; Opp. *Hal.* II.533–52), but most ancient accounts focus on their interactions with humans and praiseworthy moral character. Both Greeks and Romans viewed the dolphin with great affection, appreciating their friendly behaviour, swimming alongside ships and frequenting harbours, in contrast to that of most wild animals. The dolphin's role as friend to humans, however, created a somewhat paradoxical situation, in that because it was considered taboo to catch (e.g. Ael. *NA* XI.12 and no. 5 below) and was thus rarely seen out of water, its appearance and habits were not as well understood as those of other sea creatures. All ancient writers recognise the dolphin's mammalian characteristics – breathing air, giving birth to live young and suckling them (Ar. *HA* 489a 35–b7 (= Plin. *NH* IX.19), 521b 21–4, 566b 13–18, 589a 32–b11; Ael. *NA* II.52; see also WHALE no. 2) – but images of dolphins in art were often physically inaccurate, and many accounts of their activities owe more to anthropomorphism than observation.

Dolphins played a significant role in Greek and Roman mythology and symbolism, and were thus very common in all forms of art, with varying degrees of realism. In Greece they appeared most often in Dionysiac contexts (Csapo 2003), while in Roman art they were popular fountain sculptures and mosaic decorations, often ridden by cupids; the relation of such motifs to real dolphins became more tenuous over time (Ridgway 1970).

1. Dolphins and water birds

*Pottery jug, XIII Dynasty, c. 1750–1700 BCE, from Lisht, Egypt
(line drawing after New York, Metropolitan Museum of Art 22.1.95)*

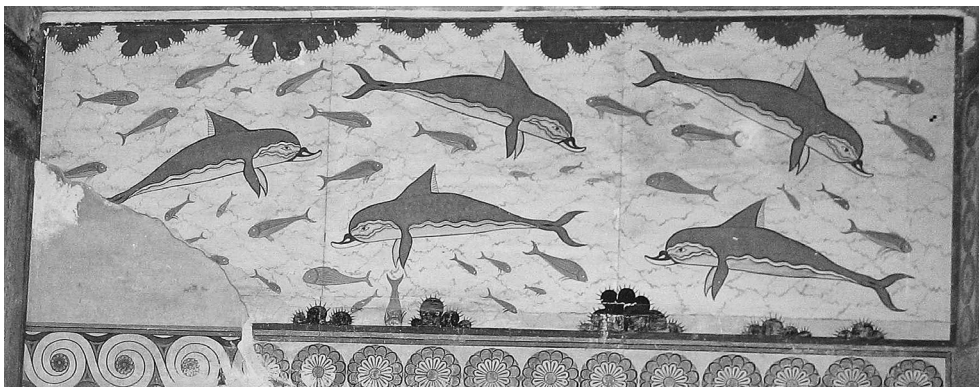


COMMENT: The so-called Dolphin Vase, found in a Middle Kingdom Egyptian tomb at Lisht, takes its name from the naturalistic depiction of dolphins – and geese (?) – found on the side of the pot. The dolphins appear to be Minoan in style while the vase's shape and manufacture are of Levantine inspiration – it probably originated in the region of Gaza, southern Palestine (Bourriau 1996; compare Doumet-Serhal 2004). Trade relations between Palestine and Egypt, with consequent stylistic and technological exchange, intensified under the Hyksos, a Semitic dynasty that controlled the eastern Nile Delta between c. 1700 and 1550 BCE. The sixteenth Lower Egyptian administrative district, with its capital at Mendes in the Delta, was actually named the *Dolphin nome*.

Three dolphins swim around the foot of the jug, while three large geese appear above each of them; a smaller bird is tucked beneath the handle. The dolphins are accurately and elegantly depicted, and the artist captures a fluid sense of freedom with which all the animals move around the vessel body. It has been suggested (McGovern 1994) that the vase shows an image of the wildlife of the Levantine coast, with dolphins in the water and migratory geese coming to rest on the beach.

2. Minoan dolphins

*Fresco from the 'Queen's Megaron', Knossos, c. 1500 BCE
(photograph by kind permission of Prof Rebecca Sweetman)*



COMMENT: Some of the most lively representations of dolphins in classical art are the earliest: this fresco from the Minoan palace at Knossos shows a pod of dolphins at sea, surrounded by various kinds of fish. It has been restored as a wall-painting, but comparable examples from sites at Agia Triadha in Crete and Agia Irini in Kea now suggest that it was originally a floor decoration. The dolphins are rendered in unnatural colours, blue above and yellow below, with a wavy red stripe along their sides: some scholars have tried to identify a particular species (Gill 1985: 65–7; Morgan 1988: 61), but the colour combination and wavy stripe may in fact owe more to the fact that dolphins are seen swimming half in and half out of the water. No representations of dolphins in Minoan art are particularly accurate, and mistakes tend to be repeated: all Greek artists show the tail fins as though seen from above, even when the dolphin is depicted side-on, but here the dorsal and pectoral fins are wrongly aligned, and in other frescoes they are often fluked like those of fish. But despite the difficulties of accurate representation, the frequent depictions of dolphins accompanying ships in Minoan art demonstrate that they were popular companions of sailors from the earliest times (Morgan 1988: 62–3).

3. The dolphin and the *polis*

a) Dolphin-shaped bronze cast coin of Olbia, fifth to fourth century BCE



Inscription: ARICHO

b) Silver drachma of Zankle, c. 500 BCE



Inscription: DANKLE

COMMENT: The bronze dolphins above are some of the most unusual among all Greek coinage: in the very earliest period of minting, at the end of the sixth century BCE, the Milesian settlement of Olbia on the Black Sea began to produce large numbers of cast bronze coins in the form of a dolphin, unmistakable from its beak and dorsal fin. Such coins originated as tokens for dedication to Apollo, but rapidly came into use as currency, and were widespread in the region for a century or more. The example here, from the later period, carries what seems to be a magistrate's name (Zograph 1977). When Olbia subsequently began to strike more regular round silver coins, it retained the dolphin as its symbol, together with the eagle. The coin below is also early, and was minted at the other side of the Greek world by the city of Zankle in Sicily. Zankle (later Messina) was named for its sickle-shaped harbour (Thuc.VI.4.5), which can be seen on the coin surrounding a leaping dolphin. It may have been a comment on dolphins that inhabited the bay: Aelian describes a tame dolphin which lived in the harbour at Poroselene near Lesbos (*NA* II.6). The coins of many other *poleis* also carry images of dolphins, alone or with other animals, though Istros' type of a dolphin carried off by a sea-eagle is most unlikely. Images of humans riding dolphins, as found at Taras and Corinth (among others), usually relate to the dolphin's role in foundation myths (Barringer 2016).

4. An epitaph for a dolphin

Greek Anthology VII.215 (*Anyte of Tegea*)

No longer delighting in the sea, my element,
Shall I raise my neck as I rush upward from the depths,
Nor shall I spout around the painted prow of the well-made ship,
Proud of its figurehead made in my own image;
For the dark water of the sea cast me onto the shore,
And now I lie here on this narrow strand.

COMMENT: This is one of three Hellenistic epitaphs for dolphins, written about wild animals that have stranded themselves and died. Anyte's verse, and the similar example by Archias which precedes it in the collection, celebrate the dolphin's vitality in life and its enjoyment of the water, something we recognise ourselves; a variant (VII.216, by Antipater of Thessalonica) extends the theme to include the dolphin's hope of receiving burial. The phenomenon of stranding, which usually involves an ill or injured individual, was recognised in antiquity; Aristotle says that dolphins will beach themselves on dry land, though it is not known why (*HA* 631 b2), and Oppian, in another instance of anthropomorphism, credits dolphins with coming to land when they realise they are dying, hoping to be buried with dignity and avoid being seen in death by their marine subjects (*Hal.* II.628–41). Perhaps in some cases a stranded dolphin was buried by the local community, in contrast to the treatment of whales (see WHALE no. 3).

5. Dolphins and humans

Plutarch, On the Intelligence of Animals 984a–985c

Indeed in many Greek *poleis* there are temples and altars of Artemis Diktyinna and Apollo Delphinios. And Apollo is said by the poets to have chosen his site of worship on Delos himself, for a dolphin guided the ancestors of the Cretans there as settlers. It was not the god himself swimming before the ship in the form of a dolphin, as the

mythographers relate, but rather he sent the dolphin to lead the settlers' ship to Cirrha. And the story is also told of the two men, Soteles and Dionysius, sent by Ptolemy (II) Soter to bring back Serapis; their ship was caught by strong winds and they were carried against their will around Cape Malea to the eastern side of the Peloponnese. They were lost and anxious, but a dolphin appeared at the prow of their ship, as though inviting them to follow, and led them to safe anchorage and regions where the swell was low, and kept them safe, and guiding them in this way it accompanied the ship all the way to Cirrha.

It is no surprise, then, that Apollo should be fond of the music-loving dolphin: Pindar compares himself to a dolphin when he is stirred 'like a dolphin at sea, which the sweet tone of the pipes makes dance in the waveless ocean.' But it is more likely that the dolphin is loved by the god for its affection towards humans: it is the only creature which is friendly to people of its own volition. Among land animals some avoid humans, and the domesticated animals only show affection to those who feed them, as dogs, horses and elephants do to their owners. Swallows make their nests in buildings for practical reasons, seeking shade and safety, but they flee from humans in fear as from other wild beasts. Only the dolphin has been given the gift by nature which is the goal of the wisest philosophers – affection without the thought of gain. Although dolphins need nothing from humans, they are friendly and well-disposed to all, and have helped many people.

As evidence, who does not know the famous story of Arion? And you, my friend, also reminded me opportunely of Hesiod's tale [at 969e], although you left the story half-told: when telling of the dog, you should not have left out the dolphins, for one cannot understand the story of the dog which revealed its master's murderer by barking and snarling, if a pod of dolphins had not taken up the body which was floating in the sea near the Nemean temple, and passed it willingly from one to another until they brought it to shore at Rhium and revealed that the man had had his throat cut. And Myrsilos of Lesbos relates the story of Enalos the Aeolian, who was in love with the daughter of Smintheus; she was cast into the sea by the Penthelidai in response to an oracle of Amphitrite, and Enalos too threw himself into the sea, whereupon he was rescued by a dolphin which carried him back to the shore of Lesbos.

The protectiveness and affection shown by the dolphin for the boy of Iasos was so great that it seemed to be genuine love: for it would sport with him and swim with him each day, and allow itself to be stroked; and when he mounted on its back it did not flee, but willingly carried him wherever he asked it to go, while all the citizens of Iasos would flock to the shore to see it. One day they were caught in a violent hailstorm, and the boy fell from the dolphin's back and drowned, but the dolphin took up his body, brought it to dry land, and refused to leave his side until it too expired, judging it right to share the fate for which it felt responsible. This sad event is commemorated by the Iasians on their coinage, which bears the image of a boy riding a dolphin.

Because of this, even the fanciful story of Coeranus has come to be believed: he was a Parian, and once in Byzantium he came across a catch of dolphins which had been netted and were about to be slaughtered; he bought them and set them all free. A short time later, so they say, he was sailing on a trading ship with fifty Milesians aboard, when the ship capsized in the straits between Naxos and Paros, and all the other passengers drowned, but he is said to have been lifted up and carried safe to shore at Scinthos by a dolphin, near a cave which people still point out today and call 'Coeranus' cave'. Archilochus is supposed to have written this line about him:

'Of fifty men, gentle Poseidon spared Coeranus.'

Stesichorus also tells us that Odysseus had a dolphin as his shield-device, and the Zacynthians record the reason why, as Critheus tells us: when Telemachus was just a baby, they say, he slipped into deep water close to the shore, and was rescued by dolphins which took him up and swam him back to safety. And so Telemachus' father adopted the symbol of the dolphin for his signet and shield as an honour to the animal.

COMMENT: Plutarch's rather rambling discussion offers a compendium of ancient stories about dolphins and their interactions with humans, from rescue to falling in love, and from the contemporary to the mythological. Such stories were hugely popular, and the best-known are frequently repeated in variant forms: the dolphin which rescues a shipwrecked sailor, the pod which brings a dead body to shore and the dolphin which befriends a boy and becomes his companion. Pliny the Elder relates several stories of dolphins that formed friendships with humans (NH IX.25–7), and his nephew Pliny the Younger tells at length in a letter (IX.33) of one particular dolphin that became the companion of a boy at Hippo Diarrhytus in north Africa, suggesting to his addressee that it would make an excellent topic for a poem. Williams, in a comparative study of Native American and classical tales of animals in love (2013), has demonstrated how the dolphin stories gradually became eroticised over time. While some truth may underlie the tales – Whitehead and Rendell claim that the rescues of swimmers have some basis in fact, and dolphins could certainly guide a lost ship to shore (2015: 293) – the purpose of most is philosophical, to demonstrate the goodwill and intelligence of dolphins, and Plutarch, as is his habit, compares them favourably with humans for their lack of desire for gain. Dolphin behaviour is still susceptible to such interpretations: because they are curious and usually unafraid of humans it is easy for us to assume that dolphins are exhibiting friendship and goodwill.

6. Dolphins hunting and hunted

Oppian Halieutica V.416–47, 519–72

Hunting dolphins is sacrilegious, and anyone who deliberately intends the death of dolphins is not fit to approach the gods in sacrifice, nor is he clean to touch their altars, and he pollutes those who dwell with him. For in the eyes of the gods, to kill the dolphins, rulers of the sea, is the same as killing a human; they are the followers of Zeus of the pounding sea, and have an understanding equal to that of men. Dolphins feel love for their offspring, and great fellow-feeling among themselves. Indeed, so friendly are they towards men that on the island of Euboia among the Aegean waves, they assist in the catching of fish in the following way. When the fishermen hasten to their work at evening, carrying a light to lure the fish, a bright flame in a bronze lantern, the dolphins come up to join them, eager for the hunt. Then the fish, frightened by the light, turn to flee, but the dolphins fall on them in a group at the mouth of the bay and terrify them, turning them away from the deep sea and driving them back onto shore, leaping close upon them like hunting hounds which race with the huntsmen, baying to one another. And the bewildered fish, forced close to shore, are easily speared with the pointed trident; unable to escape, they leap on the surface of the water, driven by the fire and the noble dolphins. And when the hunt is successfully ended, the dolphins wait nearby for their reward, their share of the catch, and the fishermen willingly give them their share of the spoils, because if anyone were selfish enough to refuse, the dolphins would no longer assist him in the hunt.

...

But even though dolphins are so kind to humans, and of such like mind with them, even so the shameless Thracians and Byzantines are hard-hearted enough to hunt them; such men are cruel and full of evil, and would not spare their own children or fathers, and would kill their own brothers without a thought. This is how their vile hunt is carried out: the mother dolphin (poor mother!) bears twin calves which follow closely at her side, like little children, and it is against these that the cruel Thracians devise their hunt, fitting out a light boat for the grisly work. When the young dolphins see the craft speeding towards them, they stay without fear and have no thought of danger, not expecting to encounter any trap or danger from humankind; rather they greet the hunters enthusiastically, like friendly comrades, joyfully approaching their doom. The fishermen cast rapidly with the spearing trident which they call a harpoon, most savage instrument of the hunt, and strike one of the young dolphins with unforeseen destruction. It straightaway writhes in pain and dives beneath the waves, racked with pain and distress; the fishermen do not attempt to haul it in by force, for that would be fruitless and render their effort in vain; instead they let out a long line as the dolphin flees and ply their oars to follow along its path. Once the calf has been exhausted from its injuries and its struggles with the iron barb, then it is weak enough to be drawn in, its strength gone and unable to dive below, gasping its last. Still its mother does not abandon it, but follows after it in its distress as it rises to the surface, seeming to suffer the most terrible pangs of grief; her mourning is like that of a mother whose city has been sacked by the enemy and her children dragged away as captives; she seems to suffer the same anguish as her calf, circling about it as though she herself were wounded. But her other calf she drives away, falling on it to encourage it to flee, as though saying to it, 'Flee, my child! For men have become enemies to us, who were formerly our friends, hunting us with iron; they make war on dolphin-kind, breaking the treaty of the gods and abandoning the friendship which used to exist between us and them.' This she would say, voiceless though she is, and her calf turns to flee in fear; but she remains to suffer alongside the other, so grievously wounded, and stays close beside it; she could not be made to leave her child by blows or any other threat. And when her unhappy child is drawn in, she too is hauled up, poor creature, and falls into the hands of her enemies.

COMMENT: Oppian preserves the strongest statement of attitudes towards dolphins in antiquity: killing them is wrong, because they share so many characteristics with humans. Throughout his account, in book II and here, he treats dolphins with a striking anthropomorphism, attributing to them an idea of mind, with desires and suspicions. The co-operative fishing described in the first part of the extract is well documented from different parts of the world today; there are documented modern examples from Brazil, Myanmar and Mauretania (Whitehead and Rendall 2015: 110–13). Similar behaviour is described by Pliny (*NH* IX.29–33), though he locates the practice to the marshes near Nîmes and the Iasian Gulf near Miletus (plainly a hotspot for ancient dolphin–human interactions). Even though there were several different accounts in circulation the behaviour described is the same, with the dolphins barring the mullets' escape to deeper waters and driving them into the shallows. In Pliny the dolphins appear to be more domesticated, summoned by shouting and fed bread mash with wine as a reward, in contrast to the more independent behaviour of the Euboian dolphins.

Oppian also gives a disapproving account of dolphin-hunting as carried out by non-Greeks; Xenophon commented on the fact that dolphins were eaten by the barbarous Mossynoeci in his *Anabasis* (V.4.28), and the fisheries here account for the occasional finds of salted dolphin in Greek contexts (Papadopoulos and Ruscillo 2002: 200 n. 48). Oppian's description of the hunting

is extended and pathetic, playing on the suffering of the calf and the grief of the mother; it is not particularly realistic, given that twin births are very rare in dolphins, but is intended to emphasise both the dolphin's famous parental affection (Ar. *HA* 566b23; Plin, *NH* IX.21; Ael. *NA* I.18) and its presumed capacity for emotion. Of course the scale of ancient dolphin-hunting was negligible compared to the effects of modern-day fishing; the Whale and Dolphin Conservation Society estimates that each year about 300,000 dolphins and whales die trapped in industrial fishing nets (www.wdcs.org).

Bibliography

- J.M. Barringer, 'The Shefton dolphin-rider', in J. Boardman et al. (eds), *On the Fascination of Objects: Greek and Etruscan art in the Shefton Collection* (Oxford 2016), 117–29.
- J. Bourriau, 'The dolphin vase from Lisht', in R.E. Freed (ed.), *Studies in Honor of William Kelly Simpson* (Boston 1996), 101–16.
- E. Csapo, 'The dolphins of Dionysus', in E. Csapo and M.C. Miller (eds), *Poetry, Theory, Praxis: the social life of myth, word and image in ancient Greece. Essays in honour of William J. Slater* (Oxford 2003), 69–98.
- C. Doumet-Serhal, 'Sidon: a jar with fish or dolphin decoration', *Archaeology and History in Lebanon* 19 (2004), 106–9.
- A. Frantzis et al., 'The enigma of harbour porpoise presence in the Mediterranean Sea', *Marine Mammal Science* 17 (2001), 937–44.
- M.A.V. Gill, 'Some observations on representations of marine animals in Minoan art, and their identification', *BCH* 11 (1985), 63–81.
- K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
- P. McGovern, 'The archaeological origin and significance of the Dolphin Vase as determined by neutron activation analysis', *Bulletin of the American School of Oriental Research* 26 (1994), 31–43.
- L. Morgan, *The Miniature Wall-Paintings of Thera: a study in Aegean culture and iconography* (Cambridge 1988).
- J.K. Papadopoulos and D. Ruscillo, 'A *ketos* in early Athens: an archaeology of whales and sea monsters in the Greek world', *AJA* 106 (2002), 187–227.
- B. Ridgway, 'Dolphins and dolphin-riders', *Archaeology* 23 (1970), 86–95.
- H. Whitehead and L. Rendell, *The Cultural Lives of Whales and Dolphins* (Chicago 2015).
- C. Williams, 'When a dolphin loves a boy: some Greco-Roman and Native American love stories', *Classical Antiquity* 32 (2013), 200–42.
- A.N. Zograph, *Ancient Coinage* (trans. H. Bartlett Wells), *BAR Suppl.* 33 (Oxford 1977).

WHALE

The whale existed at the margins of belief in antiquity: as creatures of deep water they are difficult to see fully even from a boat, and most people encountered them only as beached specimens which were often distorted. In the popular imagination whales were vast and mysterious monsters which populated myth, menacing Andromeda or swallowing unfortunate travellers such as Jonah (below no.1). There are no Near Eastern or Classical depictions of whales that approach any kind of accuracy: artistic imagination gave them snaky bodies, scales, horns or tusks (Papadopoulos and Ruscillo 2002: 216–21).

Among specialist writers knowledge was more extensive; whales' mammalian characteristics were understood, and several different types of whale were distinguished: the general term was *phallaina/baleina*, which referred usually to the fin whale (*Balaenoptera physalus*), the most common Mediterranean whale, but there was also the *physētēr*, a large ocean-going whale, which Strabo says spouts up a pillar of cloud (*Geog.* III.2.7), and the *orca* or killer whale. By far the most common term used, however, is the generic *kētōs*, sea-monster (from which the modern term cetacean derives). Those who travelled outside the Mediterranean encountered very large oceanic whales in both the Atlantic and the Indian Ocean (*Str. Geog.* III.2.7, XV.2.13). Alexander's admiral

Nearchus encountered a whole school of gigantic whales at Cyiza during his voyage along the Makran coast, and describes how the sailors shouted, splashed their oars and sounded trumpets to scare them away (Arr. *Ind.* XXX.1–9).

Whale products were exploited (Petr. *Sat.* 21.2 and no. 3 below), but most bones were either recovered from beachings or were washed up onshore as disarticulated finds. Beached whales naturally attracted attention, but could present significant problems as they decomposed: Plutarch (*Mor.* 981b) claims that a whale which beached itself at Boulis on the Corinthian Gulf some years previously had caused a plague.

1. Jonah and the . . . big fish

Hebrew bible, Jonah 1.11–2.1–6,

The sea was getting rougher and rougher. So (the sailors) asked (Jonah), ‘What should we do to you to make the sea calm down for us?’

‘Pick me up and throw me into the sea,’ he replied, ‘and it will become calm. I know that it is my fault that this great storm has come upon you.’

Instead, the men did their best to row back to land. But they could not, for the sea grew even wilder than before. Then they cried out to the Lord, ‘Please, Lord, do not let us die for taking this man’s life. Do not hold us accountable for killing an innocent man, for you, Lord, have done as you pleased.’ Then they took Jonah and threw him overboard, and the raging sea grew calm. At this the men greatly feared the Lord, and they offered a sacrifice to the Lord and made vows to him.

Now the Lord provided a huge fish to swallow Jonah, and Jonah was in the belly of the fish three days and three nights.

From inside the fish Jonah prayed to the Lord his God. He said:

‘In my distress I called to the Lord,
and he answered me.

From deep in the realm of the dead I called for help,
and you listened to my cry.

You hurled me into the depths,
into the very heart of the seas,
and the currents swirled about me;
all your waves and breakers
swept over me.

I said, ‘I have been banished
from your sight;
yet I will look again
toward your holy temple.’

The engulfing waters threatened me,
the deep surrounded me;
seaweed was wrapped around my head.

To the roots of the mountains I sank down;
the earth beneath barred me in forever.

But you, Lord my God,
brought my life up from the pit. . . ’

...

And the Lord commanded the fish, and it vomited Jonah onto dry land.

COMMENT: The Hebrew text of Jonah uses the words *dāg gaddōl*, ‘great fish’ to describe the sea monster – one of many that appear in the bible (Genesis 1.21; Job 7.12; Ezekiel 32.2; Psalms 74.13) – which swallowed the Israelite prophet (Sasson 1990). Early Christian and some (but by no means all) Islamic traditions nevertheless assumed that Jonah’s ‘great fish’ was in fact a whale. Christian mythologists, always keen to find an Old Testament parallel for the Gospels and Epistles, likened Jonah’s three days in the whale’s belly to Jesus’ three-day entombment following the Crucifixion. But in fact there is no reason to suppose that the Hebrew author had a whale in mind when he composed the Jonah story; rather he drew upon ancient traditions wherein gods sent fantastic creatures from the heavens and the seas to interact with mankind. In the Gilgamesh epic, for instance, the hero and his sidekick, Enkidu, encounter, combat and slay a series of god-sent beasts, such as scorpion men, the Bull of Heaven and the demonic forest-dweller Humbaba. For ancient peoples there was no question that these creatures were real: they simply lived in the far-distant supernatural realm. So Jonah’s ‘great fish’, with its ability to swallow a man whole, was as real to the ancient Hebrews as any other sea creature they might encounter on a more routine basis. Interestingly, the Canaanites associated great sea monsters with the god Yamm, the ruler of the waters (Gibson and Gibson 1977), and indeed Yamm sometimes took the form of a great fish. It is possible, therefore, to think that at the heart of the Jonah story lies an old myth in which Yahweh himself, changed into fish-form, protected his prophet within his own belly.

2. How whales breathe

Aristotle On Respiration 476b 14–30

Concerning cetaceans, among animals which live in the sea, there is some confusion, but these too can be encompassed by the theory, that is, creatures such as dolphins and whales, and all those which have what is termed a blowhole. These animals have no feet, but they have a lung and take in sea water. The reason for this is as I have just explained: they do not take in the water in order to cool themselves, because this is achieved by respiration. For they have a lung, and for this reason they sleep with their heads out of the water, and dolphins are even known to snore. And if they become tangled in nets, they rapidly suffocate because they cannot breathe. This is why creatures of this kind rise up out of the waves, in order to breathe. But since they must find their food in the water, and must take in water when swallowing it, this is why all of this kind possess a blowhole. For they take in the water and spout it out through the blowhole, as fish do through their gills. Evidence for this can be seen in the placing of blowhole: it does not lead to organs in which the blood circulates, but is placed in front of the brain and discharges the water there.

COMMENT: The whale was the animal for which popular and scientific understanding were furthest apart. In his minor treatise on breathing Aristotle here wrestles with the question of whether cetaceans breathe and reaches a largely correct conclusion, though he does not account correctly for the water spouted out by whales and dolphins. Knowledge of the whale’s lung no doubt came from the examination of beached specimens, and Aristotle connected this with known cetacean behaviour; Pliny says more explicitly that whales breathe through a tube which runs from the forehead to the lung (*NH IX.19*). Both writers also state that whales are mammals, suckling their young with milk (*NH IX.21*; *Ar. HA 521b 12, 566b 2–9*). It has been suggested that Aristotle even understood the difference between toothed and baleen whales, from a brief reference in his discussion of hair (*HA 519a 23–5*): ‘the “moustache-whale” has no teeth in its

mouth, but bristles like those of pigs'. Such knowledge again no doubt derived from the examination of beached whales, but there is no further indication that baleen whales' diet or feeding methods were understood.

3. The death of the whale

Procopius History of the Wars VII.29.9–16

It was at this time too [548 CE] that the whale which the Byzantines called 'Porphyrios' was caught. This whale had been an annoyance to the city of Byzantium and the surrounding areas for more than fifty years, though not continuously, for it would sometimes disappear for long periods. It sank many ships and terrified many on board, forcing them to travel far out of their course. It became Justinian's concern to capture this animal, but he was not able to find any means of achieving his aim. How it came about that the whale was ultimately captured, I will now relate. The sea happened to be extremely calm, and a great pod of dolphins gathered very close to the entrance to the Euxine Sea; when they suddenly caught sight of the whale they scattered in all directions, each trying to save itself, and most of them entered the mouth of the Sangarius river. The whale caught some of them and devoured them straight away, but driven on either by hunger or simply by love of slaughter it continued to pursue the rest, and without realising it gradually approached very close to the shore, whereupon it became completely stuck in deep mud. Although it thrashed about trying to extract itself as quickly as possible, it was unable to escape the shallows and sank further into the mud. When the people realised what was happening they came running up and fell on the whale, chopping at it from all sides with axes; nevertheless they did not kill it, but dragged it away with stout ropes to meet its retribution. When it was loaded onto carts it was found to be more than thirty cubits long and ten across. The people then divided into groups to receive their share of the flesh, and some ate it immediately while others decided to salt their portion.

COMMENT: It is noteworthy that most stories about whales in our ancient sources are about their killing: this example from Procopius, Pliny's story about the orca which was trapped and killed in the harbour at Ostia (*NH* IX.14–15), and Oppian's long and extremely gory account of whale-hunting in the Atlantic (*Hal.* V.109–351). Even Lucian, whose *Vera Historia* includes the tale of a ship swallowed by a whale 1,500 stades in length, i.e. about 220 km, concludes his story with the death of the animal (I.30–II.2). There are several reasons to account for the evident pleasure taken in killing whales. First, because whales are so large and powerful in comparison to humans, it was seen as a great achievement; the mass killing of exotic animals in the Roman arena is generally understood as a demonstration of human power over hostile nature, and the same mentality extended to creatures of the sea – we can note the high status of those who wished to kill so mighty a beast, the emperor Justinian in the above example, and the emperor Claudius in Pliny's tale. Claudius in fact turned the hunting of a trapped whale into a public entertainment. Second, as noted above, whales were not well understood and were seen as monstrous – Procopius uses the word *kētos* to describe Porphyrios, though it was most likely an orca – and hence killing a whale had something of the heroic exploit about it. Even though the people of Byzantium were happy to eat the stranded whale, the fact that it had been named and gained legendary status over fifty years (if indeed it was a single whale) suggests a level of awe felt towards it: 'Porphyrios' or 'Purple' may be a colour description, but may also have overtones of royalty, as referenced in Aelian's passage below.

4. Killer whales

Aelian On the Nature of Animals XV.2

The 'sea-ram' is known by name to many, but there is little clear understanding of them, apart from their depictions in art. They winter around the strait between Corsica and Sardinia, and are often seen above the waves, accompanied by dolphins of very large size. The male sea-ram has a white band around its forehead like the diadem worn by Lysimachus or Antigonos or the other kings of Macedonia; the female has curls like the wattles of a cock below her neck. Both male and female sea-rams feed voraciously on dead bodies, and they will even snatch up living men, and will capsize ships with the surge of their swimming being so large and bulky, raising a storm by their own efforts. They will even snatch up people standing on dry land: the inhabitants of Corsica say that once a ship was wrecked in a storm and one of the sailors, who was a very good swimmer, managed to cross a great expanse of sea and reach a headland of their island. Having made it to shore he stood up and rejoiced that he had escaped such danger unscathed and made it to land. But a sea-ram swimming along the shore saw him standing there, and spurred on by hunger, twisted and turned its body and thrashed the sea with its tail so that it was borne aloft by the wave that it created and carried up onto the headland, where it seized the man like a tempest or a hurricane. And that is the story the Corsicans tell of the sea-ram and its prey.

This creature has particularly powerful nostrils; it takes huge breaths, drawing in vast quantities of air, and it hunts seals in the following way. The seals realise that the sea-ram is close by and will attack them, so they quickly swim to shore, come out onto land and hide in caves among the rocks; the sea-rams follow them as they flee and station themselves opposite the caves, knowing by scent that their prey is inside. They suck in the air between themselves and the seals, which acts like a powerful summoning spell. The seal tries to avoid the attack by suction as it would an arrow or a spear-cast and at first shrinks back, but ultimately it is sucked out of the cave by the irresistible force and pulled along unwillingly as though dragged by ropes or thongs, and despite its shrieking, becomes the sea-ram's meal.

COMMENT: Aelian's exciting stories describe an animal which he calls the '*krios thalattios*' or sea-ram. From the description of its white markings and behaviour it seems probable that this is the orca or killer whale: anyone who has seen an orca ride a wave up a beach to snatch a seal will need little convincing. While it is fanciful to claim that orcas will take humans from the shore, and also that they can drag seals out of caves with the force of their breath, both tales emphasise the rapacity of orcas as hunters. Pliny describes the orca as a hunter of other whales, saying that it can best be defined as 'a great mass of flesh with ferocious teeth'. He relates how they prey on *balaenae* which have recently calved, trapping them in shallow water, and tells of one that was caught at Ostia, having entered the harbour to eat the cargo of hides from a ship that had capsized (NH IX.12–14).

Bibliography

- J.C. Gibson and J.C.L. Gibson, *Canaanite Myths and Legends* (London 1977).
K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
J.K. Papadopoulos and D. Ruscillo, 'A *ketos* in early Athens: an archaeology of whales and sea monsters in the Greek world', *AJA* 106 (2002), 187–227.
J. Sasson, *Jonah* (New York 1990).
D.W. Thompson, *A Glossary of Greek Fishes* (London 1947).

AUROCHS

The aurochs (*Bos primigenius*), the original European wild ox and ancestor of the domestic cow, was an impressive sight: aurochs bulls stood up to two metres at the shoulder and weighed up to 1.3 tonnes; their distinctive incurving horns could grow up to 80 cm long. Aurochs have been extinct in Europe since the 1600s, but in prehistoric times they ranged from Europe and north Africa to central Asia and China. The introduction of agriculture in the Neolithic began the process that gradually drove them from existence, but it is clear from zooarcheological and artistic evidence that aurochs populations persisted long after the introduction of domestic cattle (Legge 2010). In Cretan art, for instance, aurochs bulls are shown being hunted and caught long after the arrival of domesticated species to the island, and Patay-Horváth has suggested that aurochs herds were still found in the Greek Peloponnese in the archaic period (Younger 1995; Patay-Horváth 2015). Over time habitat loss and hunting contributed to their decline in the central Mediterranean, but large populations remained through the northern Roman empire in Thrace, Germany and Gaul; Roman writers, through lack of familiarity, sometimes confused it with the European bison, *Bison bonasus* (Kitchell 2014: 141–4). The aurochs' size and strength meant that they became the focus of competitive hunting in many cultures, with their horns serving as notable trophies.

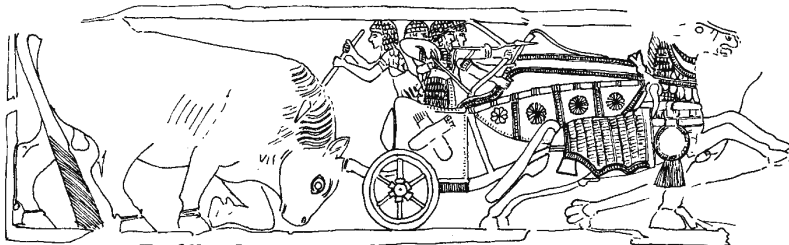
Efforts to breed the aurochs back into existence from remnant herds of semi-wild cattle began as far back as the nineteenth century (Legge 2010: 35), and more recently the Tauros Programme has started an ambitious project to recreate the aurochs as the optimal grazing animal for 'rewilded' European wilderness areas (www.taurosproject.com/).

1. The aurochs in the Near East

a) Sumerian proverbs, 5.3–7 (Alster 1997 (1): 122)

As for the aurochs,
he is disgusting to the plough. . .
Like a wild bull, you are
pleased with what is pleasant
to yourself, as they say. . .
As for the aurochs, he walks
around in the rushes. . .
As for the aurochs, he is
ever free from the plough. . .
As for the aurochs, he is the
opponent, (so) I renounce all
charges.

b) line-drawing of a Neo-Assyrian ivory from Nimrud



COMMENT: Aurochs roamed freely in the deserts, grasslands and wildernesses of the Near East, and aurochs-hunting became a veritable duty for the aristocracy and royalty of the Near East. The Assyrian ivory represented here shows the sheer size, bulk and power of the aurochs as it places its horns beneath the car of a chariot, ready to tip it up. In spite of the dangers, Tiglath-Pileser I boasts of the slaughter of herds of aurochs ('with heavy blows I took their lives . . . their skins and their horns I brought to my city of Ashur'), while the XVIII Dynasty pharaoh, Amenhotep III, proclaimed that he killed no less than 96 bull aurochs over the course of just two hunting trips to the desert (Velten 2007: 15). Shalmaneser III provides two separate accounts of a successful hunt when he slaughtered, on one occasion, 63 wild bulls and captured four alive, and, at another time, ten wild bulls and two calves (Watanabe 2002: 73). In these feats of valour, Shalmaneser presents himself as a second Gilgamesh, whose most famous exploit had been to kill the great Wild Bull of Heaven, sent down by Ishtar to cause chaos on the earth. Meanwhile, in Egypt, the pharaoh Ramses III had vast images of a successful bull hunt in the marshes carved deep into the walls of his mortuary temple at Medinet Habu in Thebes (Velten 2007: 15).

2. The Romans encounter the aurochs

Caesar, Gallic War VI.28

It is certain that many types of wild beast live in the [Hercynian] forest which are not known in other regions; I will mention those of them which are the most unusual and seem worthy of recording. . . . The third kind of animal is called the *urus*. These are a little smaller than elephants in size, but in appearance and colour like bulls. They are both very strong and very fast, and they spare neither man nor beast which they have sighted. They are caught with effort in pits and killed. The young men train themselves with this exercise and practice hunting of this kind, and those who kill the greatest number of *urus* and bring back their horns for show (which are the evidence) are highly praised. But the *urus* cannot be accustomed to human contact and tamed, even if captured when very young. The size and shape of their horns is very different from those of our own cattle. The Germani are very keen to acquire the horns, and they bind the edges with silver and use them as drinking-cups at their most splendid banquets.

COMMENT: There is some evidence that aurochs existed in Greece in pre-classical times in the Peloponnese: Patay-Horváth (2015) proposes that the many bronze votive figurines of cattle dedicated at Olympia represent aurochs, herds of which still lived in the Western Peloponnese and were hunted by those visiting the sanctuary. By the time of Herodotus, however, they were present only in the far north of Greece (VII.126). For the Romans the aurochs was an extraordinary creature which they encountered in the German and Gallic forests (Pliny *NH* VIII.38); Caesar describes it along with the elk (= ELK no. 1), emphasising the role it played in the culture of the Germani. Examples of drinking-horns of the kind described above are known from Celtic and Anglo-Saxon burials, and from more recent times – a drinking-horn which belonged to the kings of Poland, made from a horn of the so-called 'last aurochs' killed in 1620, is now on display in Stockholm. Finds of aurochs horn cores from the late Roman period at a sanctuary in Bourbonne-les-Bains (Grant and Sauer 2006) indicate both that wild aurochs populations remained and perhaps even revived in the third century CE, and that desire for aurochs-horn cups was as strong among the later Romans as among the Germani.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
A. Grant and E. Sauer, 'The aurochs: nature, worship and exploitation in Eastern Gaul', *Antiquity* 80 (2006), 622–37.
K.F. Kittell, *Animals in the Ancient World from A to Z* (London 2014).
A.J. Legge, 'The aurochs and domestic cattle', in T. O'Connor and N. Sykes, *Extinctions and Invasions: a social history of British fauna* (Oxford 2010), 26–35.
A. Patay-Horváth, *The Origins of the Ancient Olympic Games* (Budapest 2015).
H. Velten, *Cow* (London 2007).
C.E. Watanabe, *Animal Symbolism in Mesopotamia. A Contextual Approach* (Vienna 2002).
J.G. Younger, 'Bronze Age representations of Aegean bull-games', in R. Laffineur and W.-D. Niemeier (eds), *POLITELA. Society and State in the Aegean Bronze Age* (Liège and Austin, TX 1995), 507–45.

ELK

The European elk (known in America as the moose), largest of the deer family, was widespread at this period, inhabiting the northern European forest, although today it is found only in Scandinavia, Estonia and Russia. It was a familiar animal to the nomadic peoples of Central Asia and its image entered into the artistic repertoire of Persia, but failed to make an impact further west into Mesopotamia or Greece. It was, however, one of a group of unfamiliar northern animals which the Romans encountered when they extended their empire into Germany with the campaigns of Julius Caesar. While it rarely merits a long description, taken together the accounts of Roman writers make a good composite of the animal (Lat. *alcis*): Pausanias (IX.21.3) says that it is a mixture of the deer and the camel, Strabo (*Geog.* IV.6.10) describes its dewlap and Pliny its large upper lip (*NH* VIII.39). Most describe the elk as rare, but this probably means only that they were not often imported to Rome to be seen in the arena. Calpurnius Siculus, writing in the reign of Nero, describes seeing an elk at the games among other exotic northern creatures such as the bison (*Ecl.* VII.59), and our only other references come from the third century CE, when small numbers of elk were brought for the games by the emperors Gordian III and Aurelian (*Hist. Aug. Gordian III* 33.1.2; *Aurelian* 33.4). Recognisable illustrations of elk from antiquity are few: in addition to the coin below, Jennison (2005: frontispiece) reproduces an arena scene on a late Roman ivory diptych which may show a hunt of elk.

1. The elk with jointless legs

Caesar, Gallic Wars VI.25–8

The Hercynian Forest, which I mentioned above, stretches nine day's journey across for a soldier travelling light: it cannot otherwise be measured as the Germans are not familiar with the measurement of roads. It begins at the borders of the territory of the Helvetii, the Nemetes and the Rauraci, and extends rightwards along the Danube to the borders of the Daci and Anartes; at this point it bends left away from the river, and by reason of its size borders on the territories of many different peoples. You could not find anyone in this part of Germany who claims to have reached the edge of the forest, even after travelling for sixty days, or who knows at what point it begins. It is certain that many types of wild beast live in the forest which are not known in other regions; I will mention those of them which are the most unusual and seem worthy of recording.

There is an ox with the form of a stag; a single horn grows from the middle of its forehead between the ears, taller and straighter than the horns of other beasts. From the top of the horn wide branches stretch out like palms. The female is similar to the male, as is the form and size of the horn.

There are also creatures called elk, similar to roes in their shape and the colour of their hide, but they are rather larger and have incomplete horns and legs which have no joints. They do not lie down to sleep, nor if by any chance they fall over can they raise themselves and get up again. They use trees for sleeping; they lean up against them and this reclining a little they take their rest. When hunters find out from these animals' tracks the place which they frequent, they dig under the roots of the trees there, or saw through them so that the top part of the tree is left standing. When the elk lean against them in their customary way, their weight breaks the weakened trees and they fall over together.

COMMENT: This brief discussion of the Hercynian Forest and its animals appears to be an interpolation into Caesar's otherwise narrative account of his military campaigns in Gaul and Germany, made by a later copyist (Hyde 1918: 232–3). Pliny tells the same story about hunting elk in his *Natural History* (VIII.39), although he seems to have been confused by different forms of the name, describing both the *alcis*, a creature like a bullock, but with a longer neck and ears, and the *achlis*, a creature from the 'island of Scandinavia', about which he tells the same story of the jointless legs. The *achlis* is also said to have the large upper lip characteristic of the moose, and hence to walk backward while grazing.

The claim that the elk has no joints is also made elsewhere about the elephant (Strabo *Geog.* XVI.4.10), with a similar description of hunting techniques; though plainly untrue (as noted at *Ar. HA* 498a 8–13) the story serves to make the unfamiliar animal more marvellous and impressive. The Romans found the vast European forest of Germany and the north a strange and threatening place – Pliny's description at *NH* XVI.6 shows this well – and the unusual animals help to heighten this impression. There may also perhaps be a link between the tale of hunting by cutting through trees and Pausanias' claim (IX.21.3) that the elk has so good a sense of smell that it is difficult to hunt in the normal way; certainly elk are shy creatures which are difficult to track, and the idea that they could only be captured by a trap may be at the root of the story.

2. Elk at the Saecular Games

Bronze sestertius, Philip I (RIC 161, Cohen 190)



Inscription: IMP M IVL PHILIPPVS AVG / SAECVLARES AVGG / SC

COMMENT: This coin, of Philip I (244–9 CE), commemorates the celebration of the Secular Games in 248 CE, a festival for the 1000th anniversary of the founding of Rome. The emperor provided *venationes* on an enormous scale, presenting the animals which had been gathered by the previous emperor Gordian III for his triumph (SHA *Gordian III* 33.1–2). The event was marked by a series of coin issues in the names of Philip himself, his son Philip II and his wife Otacilia Severa, depicting on the reverse some of the different animals from the games, including a lion, hippopotamus, antelope, deer and elk (Twente 2002). The identification of deer and antelope species in coins is not always easy, but the animal shown does appear to be heavy and large-nosed, with palmate antlers. An elk may also be depicted on a coin of the empress Salonina, wife of Gallienus, from the 250s CE.

Bibliography

- W.W. Hyde, 'The curious animals of the Hercynian forest', *Classical Journal* 13 (1918), 231–45.
G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
J. W. Twente, 'Animal reverses of Gallienus and Philip II: why are these moose called goats?', *The Celator* 16 (2002), 38.

ELEPHANT

The elephant is the world's largest land mammal, distinguished by its long, strong and flexible trunk. Large incisor teeth continue to grow throughout its life, developing into ivory tusks which can be used for defence and display. Tending to live in herds led by mature females, elephants are highly social animals (although old bull elephants tend to become solitary) which display a wide range of emotional responses to events in the life of the herd. Food comprises a wide variety of vegetation, including tree bark, and the daily drinking of water is a necessity. When enough water is accessible, elephants like to bathe each day, or to take mud baths or even dry dust baths (Saller 1998: 56–107; Wylie 2008). Elephants can live to seventy years of age, comparable to a human life-span, and like humans, they show a keen intelligence. It is no wonder that from antiquity elephants have been ascribed an almost human sagacity (see Scigliano 2002; on the elephant–human relationship in history see Trautmann 2015).

In ancient times elephants may have lived in the Syrian hinterland (Dodge 1955). They were related to (indeed probably identical to) the Asiatic (or Indian) elephant (*Elephas maximus*) found in South and Southeast Asia, but died out, perhaps because of over-hunting for ivory. The remains of a dwarf pygmy elephant (*Elephas Cypriotes*) were also found on Cyprus. Elephants were known in Mesopotamia from the earliest dynasties: elephant bones have been discovered at Babylon and Nuzi (dating to the period of Hammurabi) and a terracotta image of an elephant with a rider, dating to c. 2000 BCE, is attested from Digidiggeh in southern Mesopotamia (Scullard 1974: 28; Saller 1998: 112). The African elephant was known in Egypt in prehistoric and early Dynastic times, but with increased farming and animal husbandry emerging in the Nile Valley, the elephant, together with other large wildlife, migrated south (Osborn and Osbornova 1998: 125–30).

Elephant ivory was known in the Mediterranean before the animal itself, worked and traded by the Phoenicians (e.g. Hom. *Il.* IV.142), but by the time of Herodotus we find references to elephants as living creatures (IV.191), and after the reign of Alexander the Great they began to form part of Greek and Roman armies and to be used ceremonially. The first elephants physically encountered by the Greeks were Indian, and to begin with India was the sole source of

the war-elephants sought by Hellenistic rulers, but later both Indian and African elephants were later brought to Europe, though ancient writers and artists could often be rather hazy about the differences between the two species.

For the Greeks and Romans, the elephant stood first in the animal kingdom: as the largest, longest-lived and most intelligent of animals Pliny places it first in his zoological books. Elephants were credited with many human-like qualities – reasoning, religious belief, concern for justice and community spirit – and were also famed for showing affection towards their masters, and an ability to communicate. From the Hellenistic period onwards, elephants were imported into the Mediterranean in significant numbers, and should be counted among the domestic animals of Greece and Rome. They were held in considerable affection because of the contrast between their great strength and their docility: many stories are recorded of their gentleness with human children (Plut. *Mor.* 968e; Ael. *NA* XI.41).

There are many elephants in Roman art, some (as below) depictions of the actual elephants which served, fought or performed, and others which stood to symbolise Africa (Toynbee 2013: 50–3); on a very well-known mosaic pavement from Ostia an elephant served as the badge of a company of merchants from Sabratha who imported exotic beasts from Africa (Scullard 1974: pl. XVIII). The individual use of elephants was a sign of great ostentation – Dio says that L. Cornificius, consul in 35 BCE, held himself in such high regard that he would ride out to dinner on an elephant (XLIX.7.6) – and the idea of the chariot drawn by elephants became a mark of exceptional status for emperors and gods, but was probably more symbolic than real (Toynbee 2013: 39–46). In Roman art elephants are often shown as chequered, in an attempt to portray their wrinkled hide.

1. The proverbial elephant

a) Sumerian proverbs (Alster 1997 (I): 366)

An elephant spoke to himself
and said, ‘Among the wild
creatures of Šakan, there is no
one comparable to me [or ‘who can defecate like me’].’
The wren answered him.
‘And yet, I, in my own
proportion, I am equal to you,’
it said.

A fox trampled on the feet of an elephant. ‘It’s enough, it’s too much’, it said.

b) Babylonian proverbs (Lambert 1960: 217–19, 273)

A mosquito (?), as it settled on an elephant, said, ‘Brother, did I press your side? I will get off at the watering-hole.’ The elephant replied to the mosquito, ‘I do not care if you get on – what is it to have you (here)? – nor do I care when you get off.’

The donkey of Anšan, the . . . of Parahše, the cat of Meluhha, the elephant of the steppe . . . which bite(s) off a willow as though it were a leek!

COMMENT: The elephant enters into Sumerian literature at an early date (it receives one puzzling but potentially unflattering mention in Tablet VI of *The Epic of Gilgamesh* as ‘an elephant

who devours its own covering’); its sheer size and bulk makes it an irresistible character for the Sumerian scribes and the delight continues into the Babylonian corpus too. In Collection 5 of the Sumerian Proverbs a theme develops wherein the animals which appear in the tales are regulated by size: the massive elephant begins the collection; next is the bull, then cows make an appearance, and so on, down the scale. The Sumerian lexicon identifies ‘elephant’ by the term *til-lu-ug*, ‘lion-killer’, although the Sumerian *am-si*, a development of the word *am*, meaning ‘wild-ox’, was also employed. Given that *si* means variously ‘horn’ or ‘ray’ or some such protrusion, *am-si* – ‘elephant’ – is literally ‘wild-ox with a horn’, an obvious reference to the elephant’s tusks (see further West 1992, who suggests that ‘Akkadian-speakers in north Syria about 1800–1500 BCE called the elephant **alap Hanē*, lit. ‘ox-from-the-Hanû-steppe’, i.e., north Syria). It is interesting to see how the cuneiform languages attempted to classify species (see TAXONOMIES).

The link between ‘elephant’ and ‘wild-ox’ is so close that an alternative ‘fox and elephant’ fable reads ‘A fox trod on the hoof of a wild-ox. “It didn’t hurt!”’, it said.’ Haubold (2013: 30) succinctly explains the joy of the elephant and wren proverb: ‘the author of the collection uses the opportunity for a wonderful joke . . . (The) point, as it turns out, is . . . not to celebrate superior size. Rather, the elephant is deflated through comparison with the tiny wren.’

2. Syrian elephant

Egyptian wall painting from the tomb of Rekhmire, Thebes, XVIII Dynasty, c. 1504–1425 BCE



COMMENT: This wall painting from the tomb-chapel of the Vizier Rekhmire at Thebes shows the arrival of foreign tribute, including live animals: horses, a bear (wearing a collar) and, at the rear of the line, an elephant. The man holding the bear by a leash also carries a huge elephant tusk. Behind is a rather small Syrian elephant. Does this represent a tame animal, perhaps the personal gift of a Syria ruler? In spite of its diminutive size, the elephant has long, conspicuous tusks, perhaps ruling out the idea that this is an infant, but an adult whose size has, sadly, been scaled down by the artist. On the other hand, baby elephants can easily be captured (following the deaths of their mothers) and trained. So perhaps the tusks are more artistic aspirational indicators as to the animal’s potential, than a realistic part of its youthful appearance.

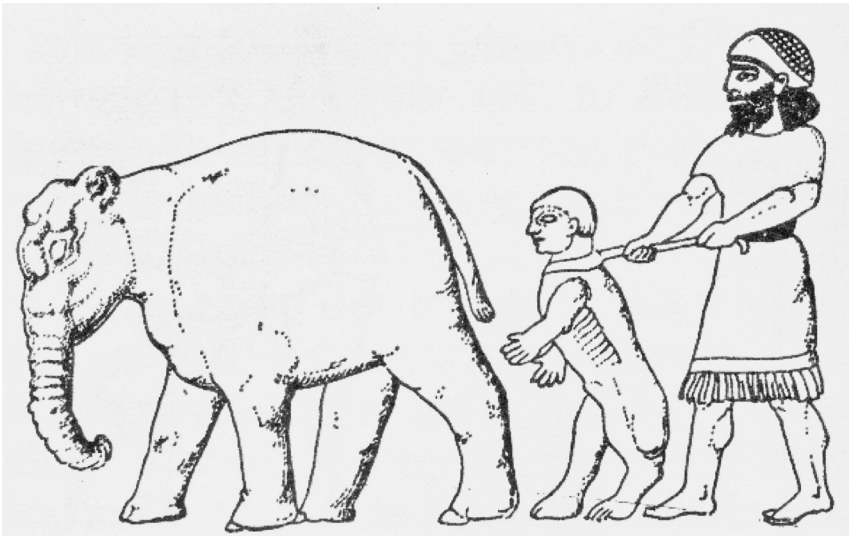
Live elephants and elephant tusks taken from slaughtered animals were often brought into Egypt as royal tribute. In the Old Kingdom, the governor Harkuf, who served the VI Dynasty rulers Memere and Pepi II, led no less than four expeditions into Nubia and recorded that,

'I found the ruler of [the confederacy of] Irtjet, Setju, and Wawat. I came down with three hundred donkeys laden with incense, ebony, *hknw*-oil, sit, panther skins, elephant-tusks, throw sticks, and all sorts of good products' (Lichtheim 1973: 26).

Elephant bones discovered in Ramses II's palace at Piramesse (Qantir) demonstrate that pachyderms were captured alive and sent to Egypt or brought as tribute, where they joined the royal menagerie as symbols of the pharaoh's domination of foreign lands. While elephants never entered into the religious world of the ancient Egyptians, their ivory was used for magical and symbolic tools and implements, as well as for decorating luxury goods and furniture. There is a single hieroglyph to indicate the word *abw*, meaning 'elephant', 'ivory' and 'Elephantine' – the southern trading post in the south of Egypt at Aswan. To *abw* was added a determinative showing an elephant or a tusk.

3. Captive elephant

Line drawing detail from the Black Obelisk of Shalmaneser III from Nimrud, c. 859–24 BCE (London, British Museum 118885)



COMMENT: The black limestone obelisk of Shalmaneser III is a vivid glorification of the deeds of the Assyrian king. It depicts five rows of tribute bearers, identified by captions, coming from Gilzanu (North West Iran, where the tribute includes fine horses), from the royal Omrid house of Israel (King Jehu is in fact depicted in the act of prostration before Shalmaneser), from Suhi on the Euphrates, from Patina (Southern Turkey) and finally from Musri (Egypt). A cuneiform text records the Egyptian tribute: 'The tribute of the country Musri; I received from there ten camels whose backs were doubled: a river-ox (water buffalo), a *sakea*-animal (rhinoceros), a *susu* antelope, female elephants, *baztlu*- (and) *uqupu*- monkeys.'

The artist who represented the African elephant brought through Egypt perhaps worked more from textual descriptions than from a living model, since the proportions of the animal are awkwardly rendered (the monkey too, with its humanoid hand and face, is quite ghoulish). The elephant's head is gawkily small, and its ears tiny and badly shaped. The animal has impressive

tusks, which means it is clearly an adult (a female, according to the inscription); its scale has been reduced to accommodate the limited space in the frieze.

Cuneiform texts recall that Assyrian monarchs often kept captive elephants (Akkadian, *pīru*) and displayed them in menageries. Shalmaneser III declares, 'I collected and displayed herds of wild-bulls (and) elephants . . . in my city Calah' and Ashurnasirpal boasts of five live elephants gifted to him by the governor of Sahu (see further Scullard 1974: 28–31).

4. Aristotle on the elephant

Aristotle Historia Animalium 497b 18–31

All four-footed animals which bear live young have front legs, not arms, although those which are polydactyl have feet which are very similar to hands. They use them in many ways like hands (and as in humans, the left is less independent than the right) except in the case of the elephant: this animal has feet which are barely divided into toes, and its forelegs are much longer than the hind ones. It has five toes, and has short ankles on its hind legs. But it has a trunk which is of such a size and form that it can use it in place of hands: for it eats and drinks by stretching the trunk to its mouth, and it reaches up to its mahout . . .; it also uses the trunk to uproot trees, and when walking through water it can breathe through it. The tip of the trunk is flexible, but not jointed; it is made of gristle.

501b 30–502a 4

The elephant has four teeth on each side of its mouth, which it uses to chew its food (grinding it like coarse meal), and as well as these it has two other 'great' teeth [tusks]. The male has large upturned tusks, and the female smaller ones which curve in the opposite way, that is, downwards. Elephants have teeth when they are born, but the tusks are not visible at first. They also have a tongue, but because it is very small and far back in the mouth it is difficult to see.

605a23–b2

Elephants suffer from diseases of flatulence, such that they can neither urinate nor pass dung. If an elephant eats earth, it is made weak, unless it goes on eating it regularly, in which case it suffers no harm. Sometimes elephants even swallow stones. They also suffer from diarrhoea, and when this happens they are treated by giving them warm water to drink, and wetting their fodder with honey, either of which cures the condition. When elephants are wearied by insomnia, they rub their shoulders with a mixture of salt, olive oil and warm water. And when they have pains in the shoulders, they apply the roasted flesh of pigs, which relieves them.

COMMENT: As can be seen from the numerous references in his zoological works, Aristotle was very knowledgeable about elephants, both their anatomy and their behaviour; he includes information on elephant breeding, behaviour and diseases and implies that it was a sufficiently familiar animal not to require special explanation. But where did he gain this knowledge? Live elephants were encountered for the first time by Alexander's army as they advanced across Persia during Aristotle's own lifetime (below): where had he seen them and learned about their training and management? One school of thought has traditionally believed that Alexander, fired

with enthusiasm for natural history by Aristotle himself (his former tutor), sent specimens of the novel animals which he discovered back to Aristotle in Greece, in a spirit of scientific curiosity (Pliny *NHVIII*.44; see Romm 1989). Attractive though the idea is, however, especially for those who wish to see Alexander as a 'renaissance man', there is no good reason to think that it is true: we have no evidence for elephants sent to Greece or Asia Minor in Aristotle's lifetime, and, as Bigwood (1993) notes, Aristotle almost certainly drew his account of the elephant from existing written sources including Ctesias and perhaps Mnesitheus' lost treatise *On the Elephant*. That he is describing trained elephants in India is plain from the third extract above, in which he is evidently reproducing the trainers' remedies and practices.

5. The elephant comes to Italy

a) Plutarch Pyrrhus 20.1–3

As a result ambassadors came to treat about the prisoners, among whom was Gaius Fabricius who, according to Cineas, had a great reputation among the Romans as a noble and warlike man, though he was extremely poor. Pyrrhus, therefore, met him in private, treated him very kindly, and tried to persuade him to accept money, representing it not as something dishonourable, but as a sign of his friendship and hospitality. When Fabricius refused, Pyrrhus left him alone for the time being, but the next day, hoping to frighten him (as a man who had never seen an elephant), he ordered the largest of his beasts to be stationed behind them as they conversed, hidden by a curtain. This was done: and when, at a prearranged signal, the curtain was drawn aside, the elephant suddenly raised its trunk, held it over Fabricius' head and let forth a raucous and terrifying trumpet. But Fabricius calmly turned and said with a smile to Pyrrhus, 'Your gold didn't move me yesterday, not your beast today.'

b) Red-figure plate, Museo Nazionale Etrusco di Villa Giulia, Rome, inv. no. 2949, from Capena, c.280 BCE. Photograph: Scala, Florence – courtesy of the Ministero Beni e Att. Culturali



COMMENT: The first elephants seen in Italy were the twenty animals brought by Pyrrhus in 280 BCE as part of his campaign against Rome in support of Tarentum. Elephants were indispensable for aspiring Hellenistic kings, and Pyrrhus is said to have acquired his either from Ptolemy Ceraunos (Just. *Epit.* XVII.2.14), or in battle against Demetrius (Pausan. I.12.3). To the Romans and the Greeks of southern Italy, the elephant was something entirely new, and Plutarch's anecdote shows the wily king attempting to make capital from the terrifying spectacle. Roman sources, as here, are quick to emphasise that their commanders met the strange animals with equanimity: they were referred to as 'Lucanian oxen', from the region in which they first appeared (Pliny *NH* 8.16), with typical Roman disparagement (see OSTRICH). The elephants proved extremely effective in battle against the Roman cavalry, and left their mark on contemporary art in several ways. The plate illustrated here, of 'Gnathia' style (black glaze decorated with white, red and yellow paint), dates to the time of Pyrrhus' invasion, and is usually taken to show one of his elephants, especially in the light of the anecdote from the battle of Beneventum in 275 about the female elephant who panicked during the battle when her calf was injured (Dion. Hal. XX.12.14). The British Museum also has a third-century black-glaze *askos* in the form of an elephant from Vulci (G161). Similarly the elephant that appears on an early Roman bar coin (*aes signatum*) with a pig on the reverse has been seen as a representation of one of Pyrrhus' beasts, which according to Aelian were frightened by squealing pigs (*NA* I.38). The four elephants that survived Pyrrhus' defeat were ultimately captured and taken to Rome for the triumph of M' Curius Dentatus, and then perished in the arena (Eutrop. II.14).

6. Hannibal's elephants cross the Rhone

Polybius III.45.5–46

At dawn on the next day after the assembly Hannibal advanced his cavalry towards the sea to provide cover for the army, while he brought his infantry out of the camp and put them on the march. He waited for the elephants and the men who had been left with them. The beasts were taken across the river in the following way.

The Carthaginians constructed many solid rafts, bound two of these together, and secured them firmly to the bank at the point of entrance to the river, making a platform about fifty feet across. Then attaching further rafts end to end with these, they stretched out a pier of rafts into the river. They protected the side which was exposed to the current with cables running from the trees which grew on the bank, to make the whole structure firm and not liable to be carried away by the river. Extending the projecting pier until it was two hundred feet long, they attached two particularly stoutly-constructed rafts to it, strongly fastened to each other, but with a fastening to the pier which could easily be cut. They then fastened many towing-ropes to these, by which the boats could tow them and sustain them against the current which threatened to carry them downstream. On these sturdy rafts the elephants were to be carried across.

Next they covered all the rafts with earth, piling it up until it was level with the path to the crossing point, and indistinguishable from it. Elephants will obey their mahouts as long as they are on dry land, but they are afraid to enter the water, so they drove them forward along the path, setting two of the matriarchs to lead them. Once they had stepped onto the last two rafts the Carthaginians cut the ropes which held them to the pier, the boats pulled on the towlines, and swiftly drew the rafts with the elephants on them away from the pier. The animals were very disturbed at this, and at first turned

this way and that in panic; but when they found that there was water on every side they were frightened and were forced to stay still.

They managed to transport most of the elephants across the river in this fashion, repeatedly ferrying the two rafts from the pier, but some of the elephants, in their terror, leaped into the river while still halfway across; their mahouts were all drowned, but the elephants survived thanks to their trunks, which were strong and long enough for them to hold them above the water and breathe through them, squirting out any water that might drown them, and so they completed their crossing walking under the water.

COMMENT: Hannibal's feat in bringing his elephants from Spain across the Alps is one of the best-known stories from antiquity: little is recorded of the elephants' actual passage of the mountains, but both Polybius and Livy (XXI.28) preserve a detailed account of how they were ferried across the river Rhone. Hannibal set out with thirty-seven elephants, presumably counting on their ability to overawe the Romans, who had not faced elephants in battle for thirty years. He succeeded in bringing them across the Rhone and over the Alps, though they suffered from lack of food in the mountains (Polyb. III.50–56; Livy XXI.33–7); they took part in the Battle of Trebia, but all but one subsequently died of cold and exposure (Polyb. III.74.11; Livy XXI.56.6). Hannibal retained this last surviving elephant as his personal mount, and it has been identified as Syrus, the one-tusked elephant named by Cato as the bravest of all Carthaginian war-elephants (Pliny *NH* VIII.11). Contemporary coins from Campania and Etruria portraying Hannibal on his elephant seem to show an Indian, not African, elephant; Syrus (the Syrian) would be an appropriate name for an Eastern beast, and Scullard (1974: 174–6) suggests that if Syrus was Indian, it might explain his survival in the cold when the African elephants perished.

Several aspects of Polybius' story are striking: he refers to the elephant-handlers as 'Indians', a term which seems to have become standard for elephant trainers of any nationality. On the other hand the idea that elephants are frightened of water is clearly untrue – elephants are good swimmers and would not have needed to walk to safety on the river bed.

7. The procurator of the elephants

CIL VI.8583

To the memory of Ti. Claudius Speclator, freedman of Augustus, procurator of the Formian estate at Caieta, procurator of the elephants at Laurentum; Cornelia Bellica to her well-deserving husband.

COMMENT: Tiberius Claudius Speclator, a freedman in imperial service under Claudius or Nero, was commemorated by his wife at Rome; he is remarkable for the post which he held, *procurator ad elephantos* at Laurentum. By the first century CE an imperial herd of elephants was kept in the country outside Rome, along with other exotic beasts: as well as the *praepositus camellorum* discussed elsewhere (CAMEL), we find in later inscriptions Aurelius Sabinus, who was *praepositus herbarium* (keeper of the herbivores) and M. Aurelius Victor, *adiutor ad feras* (assistant for the wild animals) (CIL VI.10208, 10209; Epplatt 2003). That this was a breeding group of elephants seems certain: although Juvenal (*Sat.* XII.106–10), referring to 'Caesar's herd', claims that they do not breed in Italy, Aelian (below) describes home-bred elephants in the time of Germanicus, and Toynbee (2013: 47) speculates that the forty torch-bearing elephants which accompanied Caesar in his triumph of 46 BCE may have come from the same source. Juvenal (XII.107–10) describes the ancestors of the Roman herd as battle-elephants, but there is no evidence to suggest that this

was a military troupe: Arrian (*Tactica* 22) says that elephants had ceased to be used in war by his time, apart from the odd ceremonial example (for example, in Claudius' invasion of Britain (Dio LX.21.2)). Indeed in 193 CE the emperor Didius Julianus made an attempt to press the imperial elephants into service for war to oppose the invading Septimius Severus, but according to Dio (LXXIV.16.2–3) they refused to carry either towers or riders. Spectator's elephants, then, were trained to perform in ceremonies and shows, as suggested below.

8. The dissection of the elephant

Galen On Anatomical Procedures 619–20.

[Immediately before this passage Galen explains that all animals have a bone in the heart; in small animals it is made of soft cartilage, in medium-sized ones of normal cartilage, and in larger animals it is a bony cartilage.] For this reason it sometimes evades detection even in larger animals. Larger, did I say? Why, when a great elephant was killed in Rome, all the doctors gathered for its dissection, in particular to find out whether its heart has two apices or one, and two chambers or three. Before the dissection took place I predicted that they would find the heart to have the same structure as in all other air-breathing animals; and so it proved when the heart was opened. And I and my pupils easily found the heart-bone, which we felt with our fingers. But those without practice in these methods, expecting to find that the form of the larger animals was similar to that of the smaller, i.e. without a bone, declared that even the elephant's heart has no bone. I was about to demonstrate to them that it does, but my pupils, amused at their inability to feel the bone, through their ignorance of the anatomy, asked me not to, so I forebore. When, however, the heart was removed by Caesar's cooks, I sent one of the experienced pupils to ask the cooks to permit him to extract the bone from it; and this he easily did, and I have it to this day.

COMMENT: Galen's *Anatomical Procedures* dates from 177 CE, when he lived in Rome as physician to the emperor Marcus Aurelius; in this period dissections of domestic animals and apes were certainly carried out, as Galen's own discussions show, and this passage suggests that the bodies of animals from the arena might also be investigated by doctors and scientists. Scarborough (1985) casts doubt on the idea that Galen had dissected every animal about which he writes, suggesting that many of his anatomical theories were made from analogy rather than by direct investigation, but the circumstantial detail in this case supports the idea of an exhibition event. Most interesting is the implication that parts at least of the elephant were taken for cooking by the imperial kitchens: Pliny (*NH* VIII.8) says that elephant trunk was thought to be a delicacy, though more for its conspicuous expense than for its taste. The passage adds credibility to the theory that the bodies of exotic beasts from the arena were distributed as meat (Kyle 1995): see GIRAFFE.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
J.M. Bigwood, 'Aristotle and the elephant again', *AJP* 114 (1993), 537–55.
B. Dodge, 'The elephant in Bible lands', *The Biblical Archaeologist* 18.1 (1955), 17–20.
C. Epplert, 'The preparation of animals for Roman *spectacula*: *vivaria* and their administration', *Ludica* 9 (2003), 76–92.
A.K. Grayson, 'Ambush and animal pit in Akkadian', in R.D. Briggs and J.A. Bickerman (eds), *Studies Presented to A.L. Oppenheim* (Chicago 1964), 90–4.
J. Haubold, *Greece and Mesopotamia. Dialogues in Literature* (Cambridge 2013).

- G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
- D.G. Kyle, 'Animal spectacles in ancient Rome: meat and meaning', *Nikephoros* 7 (1995), 181–205.
- W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960).
- M. Lichtheim *Ancient Egyptian Literature. Volume I: The Old Kingdom* (Berkeley 1973).
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Museion* 6 (2006), 1–25.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- P. Pfälzner, 'The elephant hunts of Bronze Age Syria', in J. Aruz, S.B. Graff and Y. Rakic (eds), *Cultures in Contact. From Mesopotamia to the Mediterranean in the Second Millennium BC* (New York 2013), 112–31.
- J.S. Romm, 'Aristotle's elephant and the myth of Alexander's scientific patronage', *AJP* 110 (1989), 566–75.
- M. Saller, *Elephants. A Cultural and Natural History* (Cologne 1998).
- J. Scarborough, 'Galen's dissection of the elephant', *Koroth* 8 (1985), 123–34.
- E. Scigliano, *Seeing the Elephant. The Ties that Bind Elephants and Humans* (London 2002).
- H.H. Scullard, *The Elephant in the Greek and Roman World* (Ithaca 1974).
- J.-A. Shelton, 'Dancing and dying: the display of elephants in ancient Roman arenas', in M. Joyal and R.B. Egan (eds), *Daimonopylai: essays in classics and the classical tradition presented to Edmund G. Berry* (Winnipeg 2004), 363–82.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- T.R. Trautmann, *Elephants and Kings. An Environmental History* (Chicago 2015).
- M.L. West, 'Elephant', *Glotta* 70.3–4 (1992), 125–8.
- D. Wylie, *Elephant* (London 2008).

HIPPOTAMUS

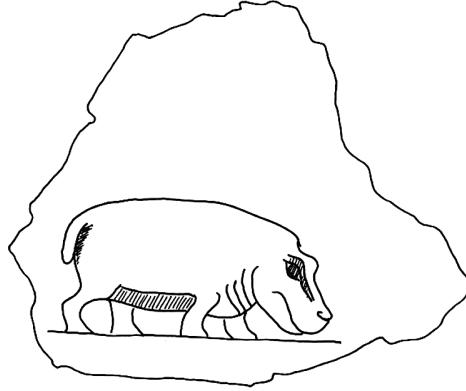
Bone finds suggest that the hippopotamus (*Hippopotamus amphibius*), a relative of the pig (or the whale – scientists are divided; see Macdonald 2010: 712–17), inhabited coastal areas of the southern Levant until at least the Iron Age, and skeleton finds and historical accounts document its existence along the Egyptian Nile prior to the eighteenth century CE. Currently, none survive north of Khartoum. Competition for the rich alluvial land it used for grazing led to the hippo being mass hunted and finally resulted in its complete extinction in Egypt.

Images of the hippopotamus exist from the Egyptian pre-dynastic period where, for millennia, it dwelt along the banks of the Nile and in the marshes of the delta. As herbivores, hippos do not generally attack people unless threatened, frightened or in pain; then they can be ferocious opponents. Very territorial, the animal can turn into an aggressive colossus if encountered unexpectedly. A mature hippopotamus (weighing up to three tons) can cause serious damage to crops and water plants through its voracious appetite.

To both the Greeks and Romans the hippopotamus was, along with the crocodile, the characteristic Egyptian animal, yet its status was paradoxical: it was well known through descriptions in historians and very frequent depictions in art, but the creature itself remained difficult to see; while hippopotamus teeth are sometimes found as dedications in Greek temples, and Roman writers occasionally refer to hippos in the arena, actual hippos were never brought to Greece, and only rarely to Rome. This is no doubt because the hippo is aquatic and hence very difficult to transport and keep, and also because of its ferocity towards humans when provoked. When depicted in Roman art it is invariably at home in the Nile, and it retained its Egyptian symbolism through to the end of the classical period.

1. Egyptian artist's painting of a hippopotamus

*Painted limestone fragment, XVIII Dynasty (c. 1479–1425 BCE),
Thebes; Metropolitan Museum of Art 23.3.6*



COMMENT: The hippopotamus (Egyptian *deb*) on this *ostrakon* was painted with the sure hand of a very skilled artist. It is a perfectly observed image of a living hippopotamus, a species which was widely seen around Thebes, both in the Nile and on its banks. Hippopotamuses spend much of their time submerged in lakes and rivers, breathing through their nostrils (which can close tight) which often become the only part of the animal that breaks the water's surface. They do emerge from the water, however, to sunbathe and graze, and this is what the artist has observed here. He carefully renders the hippo's toed feet, its muddy, shiny chocolate-brown hairless hide and the oily pinkish flesh of its neck and belly – this is, in fact, a skin excretion called 'blood sweat' that protects the hippo's skin during long periods underwater or during its excursions onto land. The redness of the skin perhaps helped the Egyptians make hippopotamuses into ideal representations of the god Seth, who was known as the 'red one', a colour associated by the Egyptians with chaos.

In addition to this fragmentary sketch, many hippopotamus statuettes survive (the Metropolitan Museum of Art alone has thirty-three examples), as testament to Egyptian artists' observation and appreciation of the natural world. Moulded in faience and covered with a blue-green glaze, the animals' bodies are decorated with river plants (lily pads, lotus and papyrus) and butterflies, symbolising the animal's natural habitat. The hippopotamus is accurately rendered, with stumpy legs, toed feet and a solemn gaze fixed ahead. Hippopotamus statuettes survive not only in faience, but in various coloured stones (Hayes 1953: I. 226). A fine faience example (Metropolitan Museum of Art, New York 17.9.1, popularly called 'William') was one of a pair found in a shaft associated with the tomb chapel of the steward Senbi II at Meir in Upper Egyptian (about thirty miles south of modern Asyut). The hippo was part of Senbi's burial equipment, which included a canopic box, a coffin and numerous models of boats and food production. Three of its legs have been restored because they were deliberately broken in antiquity to symbolically prevent the hippopotamus from harming the deceased.

It should be remembered that the seemingly benign appearance of the hippo is deceptive: to the ancient Egyptians, the hippopotamus was one of the most dangerous animals they could encounter, both in this world and in the afterlife. As such, the hippopotamus was a force of nature that needed to be propitiated and controlled in this life and the next. The destructive force of

the hippo was tempered by the belief the Egyptians had in its revitalising force: rising out of the fertile mud of the Nile's riverbanks, the hippopotamus embodied divine powers guaranteeing rebirth, so its presence in the tomb as an apotropaic figurine is understandable (as is the floral decoration which covers the faience figurines: the lotus, which closes at night and opens again in the morning, was considered to be a potent symbol of rebirth). In its benign aspect, the hippopotamus (shown standing upright) was used to represent the goddess Taweret ('the Great One'; Greek, Thoeris) the protectress of children and pregnant women. But in its destructive form the hippo was a stand-in for Seth, the god of chaos, and scenes of the king or the god Horus (or even a deceased tomb-owner) harpooning a hippopotamus can be read as depictions of the triumph of order over chaos.

A few New Kingdom reliefs and texts allude to a celebration known as the 'White Hippopotamus Festival', during which the king performed reverence to a hippo-goddess (i.e., the white hippopotamus); the sacred white colour was prized in much the same way that finding a bull with the correct markings indicated it as the sacred Apis bull to the Egyptians (Lacovara 1992: 22). The distinction between the 'good hippopotamus' (Taweret and 'the white hippopotamus') and the 'bad hippopotamus' (Seth) may also be due to gender: sexual dimorphism in Egyptian deities was common, and while the male hippopotamus was feared as a ferocious wild beast, the female was honoured for her devotion to her young (see below).

2. Noisy Nilotic hippopotamuses

Papyrus Sallier, Egyptian Second Intermediate Period (c. 1274 BCE) (Simpson 1972: 77–80)

Now as for king Apophis, it was his wish to send an inflammatory message to king Sekenenre, the prince of the Southern City. After many days following this, king Apophis then had the high officials of his palace summoned, and he proposed to them that a messenger be sent to the prince of the Southern City with a complaint . . . concerning the river, but he was unable to compose it himself. Thereupon his scribes and wisemen . . . and high officials said: 'Oh, sovereign, our lord, demand that there be a withdrawal from the canal of hippopotamuses which lies at the east of the city because they don't let sleep come to us either in the daytime or at night, for the noise of them is in our citizen's ears.'

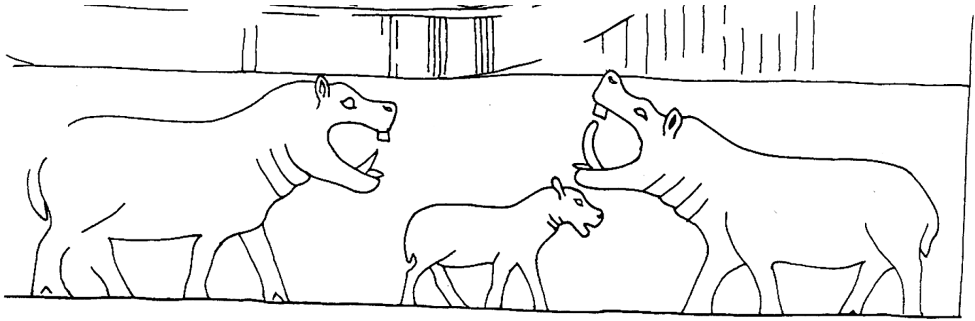
And king Apophis answered to them saying, 'I shall send to the prince of the Southern City' . . . And when the messenger of king Apophis reached the prince of the Southern City, he was taken into the presence of the prince of the Southern City, then [king Sekenenre] said to the messenger of king Apophis, 'Why have you been sent to the Southern City? Wherefore have you come journeying here?' The messenger then told him: 'It is king Apophis who has sent me in order to say, "Let there be a withdrawal from the canal of hippopotamuses which lie at the east of the city, because they don't let sleep come to me in the daytime or in the night" for the noise of them is in his citizen's ears.'

COMMENT: This text, dating to the Second Intermediate Period, recalls an insult delivered to the native Egyptian king, Sekenenre (residing in the southern capital at Thebes), by the Hyksos, the foreign invaders who had gained control over northern Egypt. The Hyksos ruler, Apophis, complains that the bellowing hippopotamuses in the Nile close to Thebes were responsible for keeping his town, hundreds of miles up-river in the Delta, awake at night. Remarkably, hippos can achieve 115 decibels and they can even vocalise under water. Males defending territories in

the river bellow loudly and often trigger a chorus from other hippos, the ensuing noise traveling along the river and inciting bellows from males at least a mile away. This wave of hippo calls travels up and down river, perhaps conveying information about where the individuals are at a given time. This information could help individuals know when they enter the territory of other hippos and avoid conflicts. This natural phenomenon might lie behind this Egyptian story, although on a symbolic level, the tale implies that the Theban king, Sekhenenre, by not keeping the hippopotamuses at bay, was failing to perform his royal duty to fend off the forces of chaos (the Hyksos), so well represented by this troublesome beast.

3. A mother protects her calf

***Wall painting from the tomb of Tii (?) at Memphis, Old Kingdom,
V Dynasty (c. 2494–2345 BCE) (after Evans 2010: fig. 9–11 AB35)***



COMMENT: Egyptian artists pay close attention to the behaviour of hippopotamuses and often record moments of their aggressive behaviour. In this particular detail from a tomb wall-painting, a female hippo protects her calf aggressively as a large male encroaches too closely on her territory. Similar painted scenes involving a female hippo's aggressive behaviour towards crocodiles are also known. Bellowing and roaring, or even a wide 'yawn' to display its teeth (the canine teeth can grow to be eighteen inches long and are used primarily for defending young and establishing a territory), are typical of a hippopotamus' display of hostility. The open mouth is a warning for hippos and other animals to keep their distance (a hippo's open mouth is an impressive sight – the lower jaw is hinged far back on its skull, allowing it to gape open its mouth for an amazing 150 degrees; a human mouth can hardly manage 45 degrees).

Female hippos gather into 'schools', but there is no bonding amongst them and they tend to graze and wallow alone unless accompanied by a calf, as shown here, which will stay with its mother until it is fully grown, around the age of eight years.

4. Job's Behemoth

Hebrew bible, Job 40.15–24

Look at [the hippopotamus],
which I made along with you
and which feeds on grass like an ox.

What strength it has in its loins,
 what power in the muscles of its belly!
Its tail sways like a cedar;
 the sinews of its thighs are close-knit.
Its bones are tubes of bronze,
 its limbs like rods of iron.
It ranks first among the works of God,
 yet its Maker can approach it with his sword.
The hills bring it their produce,
 and all the wild animals play nearby.
Under the lotus plants it lies,
 hidden among the reeds in the marsh.
The lotuses conceal it in their shadow;
 the poplars by the stream surround it.
A raging river does not alarm it;
 it is secure, though the Jordan should surge against its mouth.
Can anyone capture it by the eyes,
 or trap it and pierce its nose?

COMMENT: This is a lively and evocative description of a hippopotamus, although the word used for this animal in the Hebrew text is simply *behemah*, meaning ‘beast’ or, by extension, ‘great beast’, ‘domestic cattle’ or ‘wild beast’, depending on the context. In English translations of Job, the word is rendered ‘Behemoth’ and this has given rise to much scholarly debate as to what animal this is meant to be. An elephant, a water-buffalo and a rhinoceros have all been posited, but most scholars opt, justifiably, to interpret Job’s beast as a hippopotamus (Bright 2006: 24–6; Clines 2011: 1183–90). In fact, the appearance and behaviour of the hippo is well captured here and the Hebrew author’s familiarity with the animal might be explained by the fact that hippopotamuses were once found in the swamps to the north of the Sea of Galilee. Some indications in the text, however, suggest that the Hebrew author was drawing upon Egyptian mythic and cultural traditions surrounding the hippo: the references to ‘its limbs like rods of iron’, for instance, perhaps draws on the notion that iron was known to the Egyptians as the bones of Seth, and thus related to the hippopotamus (see above). Moreover, the biblical depiction of the hippo ends with two rhetorical questions alluding to the magnitude of the task of hunting hippopotamuses, a popular sport for Egyptian pharaohs and the elite.

5. An early Greek view of the hippopotamus

Herodotus, Histories II.71

The ‘river horses’ [*hippoi potamioi*] are held to be sacred in the district of Papremis, but in other parts of Egypt they are not sacred. The animal’s appearance is as follows: it is four-footed, with cloven hooves like an ox, has a snub nose, a mane like a horse, large projecting tusks and a tail and voice like a horse. It is about the size of the largest ox. Its hide is so thick that when it is cured the Egyptians make spear shafts from it.

COMMENT: This is the first description of the hippopotamus in extant Greek literature, and Herodotus’ account was to be very influential. It is a notoriously problematic passage, since it seems unlikely that Herodotus can be describing the hippo from first-hand experience, despite his

claim to have travelled extensively in Egypt (II.29). The description seems instead to have been adopted from a previous writer, Hecataeus of Miletus, whose *Aegyptiaca* (*Description of Egypt*) has survived only in fragments. But whoever the original author, this does not solve the problem of the inaccuracy of the description; the hippo is not cloven-hoofed, nor does it have a mane or a long tail. Lloyd (1976: 313–14) suggests that confusion may have arisen because hippos, spending their days in water, are difficult to observe close to; early Greek tourists, he proposes, simply extrapolated features such as the mane and tail from the animal's name. But given the frequency of hippo hunts in Egypt it seems unlikely that a curious visitor could not have found ways to make a closer inspection. The description, however, was good enough for a Greek audience that never encountered the animal outside Egypt, and it was repeated from one writer to another over hundreds of years (e.g. Ar. *HA* 502a 9–16; Diod. I.35.8–10; for Roman writers see below).

6. Hippopotamus ivory

***Hippopotamus tooth from the Heraion at Samos,
seventh century BCE (Photograph: Gösta Hellner, DAI Athens,
neg. no. D-DAI-ATH-1978/1386; all rights reserved)***



COMMENT: Excavations at the Temple of Hera at Samos, one of the biggest and most important cult centres of archaic Greece, have brought to light several types of exotic animal remains, including ostrich eggs, antelope horns and clam shells from the Indian Ocean (Boessneck and von den Dreisch 1981, 1983). Among these have been found a large number of hippopotamus canine teeth, used in antiquity as a form of ivory similar to elephant tusks (Pausanias VIII.46.4). The dedications date to the archaic period, when Samos is known to have had close political links with Egypt (Hdt. III.39.2); all the exotic objects were clearly imported and dedicated for their rarity value, though the presence of shells and horns seems to indicate that curiosity played a part as well as financial worth.

Fossilised hippopotamus bones and teeth were also dedicated in Greek sanctuaries: in prehistoric times hippos inhabited Europe, both the present-day *Hippopotamus amphibius* and giant prehistoric varieties, and the remains of these creatures, when they came to light, were thought of as relics of heroes and treated with veneration. By the Roman period such bones were recognised as the remains of once-living animals (Mayor 2000: 181–3).

7. The hippopotamus at Rome

Pliny Natural History VIII.39

A monster even greater in size is also found in the Nile – the hippopotamus, which has cloven hooves like an ox, a back, mane and voice like that of a horse, a snub nose, tail and curved tusks like a boar, though less fearsome, and a hide which makes impenetrable shields and helmets, except if it is dampened. The hippopotamus feeds on standing crops; it is said to mark out its daily portion in advance, and to leave the field walking backwards, so that no one can lay a trap for it as it returns to the river.

M. Scaurus was the first to exhibit a hippopotamus at Rome, along with five crocodiles, at his aedilician games [in 58 BCE], making a temporary channel for them. The hippopotamus is even a master of one part of the healing art, for when it has eaten too much because of its insatiable appetite, it comes out onto the shore and searches for reeds which have recently been cut; when it sees a particularly sharp stalk it leans its body onto it and opens a certain vein in its leg, and in this way relieves its body of ailments by bloodletting; then it plasters up the wound with mud.

COMMENT: Pliny's brief description of the hippopotamus is recognisably based on Herodotus, as is the similar account of Ammianus Marcellinus three hundred years later (XXII.15.21). It is surprising to find such dependence on previous writers, since Egypt had come under Roman rule as a province in 30 BCE, meaning that many more Romans would have had the chance to become familiar with the hippo in the flesh. The only improvement on Herodotus' account is the comparison of its teeth to those of a boar, which is more correct. Pliny's further material, while novel, is equally unreliable: the hippo certainly was a predator of crops, but the story of its walking backwards out of the field to confuse trackers is obviously fanciful. The account of the hippo's self-treatment for overeating is in line with ancient beliefs about cautery and bleeding, and is part of a large number of stories in both Pliny and Plutarch (*On the Cleverness of Animals*) about animals which can treat their own ailments with herbs or other forms of medicine.

8. 'Nilotic' scenes in the Roman empire

Mosaic from the House of the Faun, Pompeii, first century BCE. Photograph: Scala, Florence – courtesy of the Ministero Beni e Att. Culturali



COMMENT: The Nilotic scene, an Egyptian landscape with river inhabited by native plants and animals, became a very popular theme of Roman mosaic and painting from the first century BCE. The scenes always depict the four characteristic animals of Egypt in the Roman imagination – the crocodile, hippopotamus, ibis and duck – as well as the lotus flower. This mosaic, from the luxurious House of the Faun in Pompeii, is one of the finest examples, and the panel above shows a hippo emerging from the river, facing a crocodile. In the background are ducks and small birds; to left and right a mongoose and cobra and a pair of ibises confront each other. Here the hippo is shown as a peaceful inhabitant of the river, though its incorrectly jagged teeth may hint at a savage nature, but in most other scenes it is shown being hunted and behaves far more aggressively, even swallowing unfortunate Egyptians (Toynbee 2013: fig. 53; Versluys 2002: fig. 80). The hippos in Nilotic scenes were not drawn from life, since the pictures appear well before 58 BCE, the date of the hippo's first appearance in Rome (see above); they seem instead to have been copied as an artistic motif from Hellenistic originals (King 2001: 429–30), which may account for their varying appearance and occasional mistakes, such as their depiction with paw-like feet. From Rome Nilotic imagery spread across the Roman Empire, taking the image of the hippopotamus as far as Spain and Gaul in the West and Palestine in the East, and remained popular until the fifth century CE. While the scenes were often used as appropriately watery decoration for fountains and bathhouses, they are also frequent in domestic settings, where they evoked the cosmopolitan luxury of the upper classes.

9. A hippopotamus at the Saecular Games

Bronze sestertius of Otacilia Severa, 248 CE (RIC 200a)



COMMENT: This coin of Otacilia Severa, wife of the emperor Philip II (247–9 CE), was struck in 248 CE as part of a series commemorating the Saecular Games held to celebrate the one thousandth anniversary of the founding of Rome. Huge *venationes* were held with all manner of beasts, and the imperial family issued coins illustrating some of the more remarkable animals (see ELK). The hippopotamus depicted here is unusually true to life, with short legs, toed feet and short tail, which probably indicates personal familiarity by the die-cutter. Hippos appear to have been sufficiently unusual in the Roman arena to merit comment; after their first appearance in the first century BCE there are intermittent references to hippos seen in the time of Nero (Calpurnius Siculus *Ecl.* VII.66–8) and Commodus (Dio LXXIII.10.3, 19.1), and a suggestion that they were kept for display by Elagabalus (SHA *Elag.* 28.3; Toynbee 2013: 129). But Ammianus Marcellinus (XXII.24) says that by his own time they were not seen at Rome and had died out in Egypt from hunting.

The hippo as coin type is absent from Greece and unusual at Rome; apart from this series it is found only as a national symbol, on coins of Hadrian which depict the personified River Nile, on bronze coins from the mint in Alexandria, and among some early mint control-marks from the first century BCE, which again couple the animal with crocodiles, ibis and other typical Egyptian symbols (Meyboom 1995: Appendix 14).

Bibliography

- D. Arnold, 'An Egyptian bestiary', *The Metropolitan Museum of Art Bulletin* 52.4 (1995).
 J. Boessneck and A. von den Driesch, 'Reste exotischer Tiere aus dem Heraion auf Samos', *MDAI* 96 (1981), 245–8.
 J. Boessneck and A. von den Driesch, 'Weitere reste exotischer Tiere aus dem Heraion auf Samos', *MDAI* 98 (1983), 21–4.
 M. Bright, *Beasts of the Field* (London 2006).
 D.J.A. Clines, *Job 38–42* (Nashville 2011).
 L. Evans, *Animal Behaviour in Egyptian Art* (Oxford 2010).
 W.C. Hayes, *The Scepter of Egypt*. II vols (New York 1953).
 A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
 P. Lacovara, 'A new date for an old hippopotamus', *Journal of the Museum of Fine Arts, Boston* 4 (1992), 17–26.

- A.B. Lloyd, *Herodotus Book II* (Leiden 1975–88).
D.W. Macdonald, *The Encyclopaedia of Mammals* (Oxford 2010).
A. Mayor, *The First Fossil Hunters: dinosaurs, mammoths and myths in Greek and Roman times* (Princeton 2000).
P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
W.K. Simpson (ed.), *The Literature of Ancient Egypt* (New Haven 1972).
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
M.J. Versluys, *Aegyptica Romana. Nilotic Scenes and the Roman Views of Egypt* (Leiden 2002).

RHINOCEROS

The rhinoceros is named from the Greek meaning ‘nose horn’ (compare the modern German ‘Nashorn’) for its most distinctive feature – an aggregation of keratinous fibres located on a roughened area of the animal’s skull (in fact there is no bone core to a rhino’s horn at all). With its short, stout limbs supporting its massive bulk upon feet with three toes, the rhinoceros is a formidable animal, but not naturally aggressive unless provoked (black rhinos have a reputation for aggression, but they tend to make blind charges to see off intruders rather than launch specific attacks; Indian rhinos are also territorial and have been known to launch direct attacks, even on elephants). Males fight viciously among themselves, jabbing at one another with their horns; almost 50 per cent of males die from wounds inflicted during such confrontations. Rhinos have very poor vision but good hearing; they are noisy animals and will roar, bellow, shriek and honk. They are solitary yet sociable animals and will, when occasion calls, join up in pairs or even in temporary ‘crashes’ of ten or more (Macdonald 2009: 698–703).

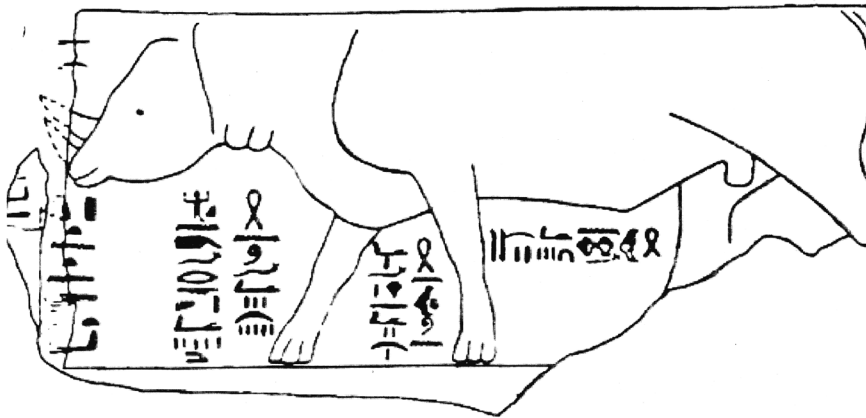
Together with elephants and hippopotamuses, rhinoceroses are surviving representatives of the so-called ‘megaherbivores’. Of the five surviving species of rhinoceros (two of which are on the brink of extinction), only three were known to the peoples of antiquity: the African black rhinoceros (*Diceros bicornis*) and white rhinoceros (*Ceratotherium simum*) and the Indian rhinoceros (*Rhinoceros unicornis*). Evidence from predynastic Egypt demonstrates that rhinoceroses flourished in the Nile Valley but they seem to have disappeared from Egypt early on in its historical period and were thence known to the Egyptians only as exotic foreign animals. The Indian rhinoceros likewise is located in early cultural artefacts of the Indus valley civilisations, but is largely unknown in Mesopotamian sources, making only rare appearances in the literary and material cultures of the Near East, and then often entering into fable and fantasy as the forerunner of the unicorn (Godbey 1939; Enright 2008: 12–16). A black limestone obelisk of Shalmaneser III, however, records the tribute received from Egypt which included ‘a *sakea*-animal’, probably a rhino.

In Greece the rhinoceros was unknown before the Hellenistic period: a live rhinoceros is supposed to have walked in the Grand Procession of Ptolemy Philadelphus in the third century BCE (Athen. 201c), while the first description by a classical writer dates from the second century BCE. No Greek or Roman writer or artist makes a clear distinction between the African and Indian rhinoceros: they considered the animal an African one, from ‘Aethiopia’, the land below Egypt along the Red Sea coast, and were not aware of the differences between the species, or between the white and black rhinoceros of Africa. While the Romans still considered the rhinoceros exotic, it made appearances as an arena beast and in exhibitions; Aelian (*NA* XVII.44) comments that by his time, the third century CE, most Greeks and Romans needed no description of the creature, as they were perfectly familiar with it. Although the white rhinoceros, the species most commonly imported to Rome, is a placid herbivore, the Romans cast it as a fierce and aggressive animal, a suitable opponent for the elephant. Pliny (*NH* VIII.71) seems to claim that they were bred in Italy, but while they were evidently to be seen in *vivaria*, breeding is unlikely.

Representations of the rhinoceros in classical art are few, and vary widely in accuracy: differences in confirmation and number of horns are more likely to arise from a lack of first-hand knowledge than attempts to distinguish particular species. A rhinoceros appears among African animals in the Nile Mosaic at Palestrina (Meyboom 1995), and it figures occasionally in later images of Orpheus taming the animals, and in 'animal paradise' scenes (Coleman 2006: 104–6). The 'Pompeian relief' of a rhinoceros illustrated by Keller (and still occasionally referenced) is in fact a sixteenth-century sculpture which copies Dürer's famous woodcut.

1. Ramses' rhinoceros

Line drawing of a damaged frieze from the temple of Armant, Upper Egypt, XIX Dynasty (after Houlihan 1996: 207 and Osborn and Osbornova 1998: 140)



COMMENT: Evidence from predynastic rock drawings suggests that at one time rhinoceroses (Egyptian, *3bw*, *irb3* and *3kb*) were common in Egypt, but by the early dynastic era the rhino population had been pushed south into Nubia (perhaps through excessive hunting). Finds of rhinoceros horn have been made at Saqqara, and these all date to the early dynastic era but thereafter no positively identifiable images of rhinoceroses are found in Egypt until the early New Kingdom (Osborn and Osbornova 1998: 138–41). A rhino is pictured in Hatshepsut's mortuary temple at Dier el-Bahri as an exotic species of Punt (Sudan or Ethiopia), and another (probably a white rhinoceros) is referred to on the Armant Stela from near Luxor as evidence of Thutmose III's hunting prowess during a military campaign in Nubia:

When [Thutmose III] spent a moment of recreation, hunting in any foreign land, the quantity that he captured was greater than what the entire army achieved. . . He captured [and killed] a rhinoceros by shooting (arrows) in the southern land of Taseti, after he had gone to Miu to seek out him who had rebelled against him in that land
(after Cumming 1982: 9)

Presumably the carcass and horn of the animal were carried back to Egypt to be displayed as a notable hunting trophy.

Not to be outdone by his adventurous warrior ancestor, Ramses II later boasted of his own bravery in capturing a live rhinoceros during one of his Nubian campaigns, and on a pylon of the temple of Armant he ordered the creation of a low relief, shown here. In contrast to Thutmose's efforts, Ramses' rhino was captured alive and brought back to Egypt to be put on display (the ropes which kept it restrained are shown here too); it must have been the centre of considerable scholarly study, as can be ascertained from the artist's detailed and accurate rendering of the animal. Remarkably, the hieroglyphic captions which accompany the scene recount specific scientific facts about the animal: its length was one cubit, one palm (60 cm); the height of its foreleg was five and a half cubits (288 cm); the foreleg's circumference was three cubits, five palms (2 m); the foot's circumference was two cubits one palm (112 cm); the circumference of the belly was thirteen cubits, two palms, two fingers (7 m); its back leg had a circumference of five cubits, three palms (285 cm). The dimensions are consistent with those of living African rhinoceroses (Enright 2008), and therefore the transportation of a fully grown, live, specimen from Nubia to Egypt was nothing short of heroic and deserved commemoration in stone.

2. The Indian rhinoceros

Ctesias F45q = Aelian NA IV.52

I have heard that there are wild asses in India no smaller than horses which have a white body, a head which is almost crimson, and dark blue eyes. They have a horn on their brow one and a half cubits in length. The lower portion of the horn is white, the upper part is crimson, and the middle is very dark. I hear that the Indians drink from these multi-coloured horns, but not all the Indians, only the most powerful, and they pour gold around them at intervals as if they were adorning the beautiful arm of a statue with bracelets. They say that the one who drinks from this horn will never experience fatal illnesses. No longer would he suffer seizures or the so-called holy sickness nor could he be killed with poison. If he drank the poison first, he would vomit it up and return to health. It is believed that the other asses throughout the world, both tame and wild, and the rest of the other solid-hoofed animals do not have an *astragalus* in their ankle nor do they have bile in their liver. According to Ctesias, however, the one-horned Indian asses have *astragaloi* and are not lacking bile. They say their *astragaloi* are black and if someone should grind them up they would be the same on the inside. These animals are not only faster than other asses, but horses and deer too. They begin to run softly, but gradually they run harder and to pursue one is, to put it poetically, to chase the intangible. When the female gives birth and guides her new-borns about, the males join them in the pasture and watch over their young.

These asses are found on the most desolate plains in India. When the Indians set out to hunt them, the asses allow those that are still young and tender to graze behind them while they fight and charge the horsemen at close quarters and strike them with their horn. Such is their strength that nothing can endure their impact. Everything succumbs to them and gets pierced; however, if by chance it is crushed to pieces, it is rendered useless. They have attacked the sides of horses and ripped them open disembowelling them. For that reason, the horsemen are too afraid to go near them because the price for getting too close is a horrible death for both themselves and the horses. The asses also have a deadly kick and their bite reaches such a depth that whatever is caught in its grip is completely torn away. You could not capture a full grown ass alive, but they are killed with javelins and arrows and when it is dead, the Indians remove the much revered horn from the animal. The flesh of the Indian ass is inedible because it is so bitter.

COMMENT: Aelian's observations derive directly from Ctesias of Cnidus, a Greek physician who spent some seventeen years practising his medical skills at the court of Artaxerxes II, King of Persia. Around 398 BCE, on his return to Greece, he began to write two books, the *Persica* (a history of Persia in 23 volumes, now surviving only in fragments) and the (equally fragmentary) *Indica*, a 'book of wonder' about the region which bordered the Persian empire and about which Ctesias must have heard while living in Persia (Llewellyn-Jones and Robson 2010; Nichols 2011).

Scholars generally accept that the Indian rhinoceros forms the basis of Ctesias' lively description, and it is generally assumed that the European fascination with the mythical unicorn arises from his somewhat confused description of the characteristics of the animal (Shepard 1930; Godbey 1939; Lavers 1999 and 2009). Ctesias' observations suggest a *bona fide* Eastern origin for his account and it is feasible to think that during the seventeen years he spent at the Persian court, he may have come into contact with a real rhinoceros or, at the very least, with colourful painted (or woven) images as well as with vivid descriptions of the animal (Nichols 2011: 128–31). Rhinoceroses once inhabited the northwest of India and Pakistan and they might have been brought to Persia, alive or dead, as tribute to the Great King. Assyrian sources state that Shalmaneser III was sent a rhinoceros as tribute from Takelot II of Egypt, so it is not out of the question that even African rhinos reached the court of the Persian king too (at Persepolis there is a scene of a giraffe or okapi being presented as tribute by Nubian ambassadors, so a vogue for animal exotica was certainly current (see GIRAFFE no. 2)).

Rhinoceros horns were regularly gifted by Indian diplomats to Achaemenid monarchs and Ctesias' description of a particularly colourful (and therefore unnatural) example perhaps confirms that he had seen a cup fashioned from a rhinoceros horn which was painted with various bands of colour and decorated with precious metals (we also know he had seen an *astragalus* – ankle-bone – from the same animal, although his observation that solid-hoofed animals lack *astragaloi* is wrong). Ctesias was used to seeing (or hearing reports of) the colourful wildlife of India – as his description of a parrot makes clear (see PARROT no. 2) – so it is easy to understand how he could accept that all other Indian animals were similarly brightly hued. Cups made from rhinoceros horns were often used for medicinal purposes in the east and Philostratus (*VA* 3.2.1), deriving his information ultimately from Ctesias, notes that the kings of India drank from horn-cups as a preventative against poisoning (Nichols 2011: 132–5).

The description of the fierceness of the rhinoceros is accurate and Ctesias is also correct in his observation that rhinoceros flesh is inedible, although there is evidence that Indians used rhinoceros meat in a ritual context and that, like the Greeks, they offered inedible food to the gods (Nichols 2011: 135). The animal's flesh was likewise used in Indian medical practice to ward off a bad cough, to improve the liver and to prolong a healthy life (Karttunen 1989: 169).

3. Classical descriptions of the rhinoceros

(a) *Diodorus Siculus Bibliotheca III.35.2–3*

There is a creature which is called from its appearance, 'rhinoceros', in power and strength very similar to the elephant, though a little smaller; it has an extremely thick hide, and is the colour of box-wood. At the end of its nose it has a horn which is upcurved in shape, and is as hard as iron. This creature is constantly disputing with the elephant over its pasturing-places; it sharpens its horn on a rock and rushes into battle against it, and lowering its head under the elephant's belly, it rips the flesh with its horn as with a sword. In this way it weakens the elephant by loss of blood, and kills many of

them. But if the elephant avoids the rhinoceros' rush under its belly and seizes it with its trunk, it easily defeats it by striking with its tusks, and through its superior strength.

(b) *Strabo Geography XVI.4.15*

This country [Aethiopia] also breeds fierce leopards and rhinoceroses. This last creature is a little smaller than the elephant, not, as Artemidorus says, 'from nose to tail', although he says that he saw a rhinoceros in Alexandria, but it is a little less in height, as I saw myself. Nor is its hide the colour of box-wood: rather it is the same colour as an elephant. The rhinoceros is similar in size to a bull, and in appearance most like a wild boar, particularly in its foreparts, apart from its nose which has a single upcurving horn as hard as bone, which it uses as a weapon as boars do their tusks. It also has two ridges which wind like snakes from its spine to its belly, one at its shoulders and the other at its loins. I have described the rhinoceros as I saw it, but Artemidorus adds that it is particularly prone to fight with the elephant over its pasturage, and that it lowers its head and tears the elephant's belly, if it is not prevented by the elephant's trunk and tusks.

COMMENT: These two descriptions of the rhinoceros demonstrate ancient writers' tendency to copy material from one to another. Diodorus' account of the rhino is taken from the second-century BCE geographer Agatharchides of Cnidus, who wrote a description of the Red Sea and its environs, and Strabo's from the slightly later Artemidorus of Ephesus. Just as with the hippopotamus, a single early description has been handed down from one writer to another, and recognisably similar accounts appear in Pliny and Aelian. Even more striking is that Strabo repeats the description while disagreeing with it: he says that he has seen a rhinoceros himself, and that it is not as large as is claimed, and has two ridges around its body. Clearly Strabo is here describing an Indian rhinoceros, which is smaller than the African and with distinctive folds in its hide; although he does not say where he saw it, it is possible that it was at Rome (see below).

The idea of the battle between rhinoceros and elephant also stems from Agatharchides, and is embellished by later writers with bloodthirsty enthusiasm, but it has little basis in fact – while these two herbivores might encounter each other in the same pasturage they rarely challenge each other. The idea that the rhino sharpens its horn in preparation is also fanciful, since the 'horn', as noted above, is made of hair. But the persistence of the story rather reflects the belief that all animals have natural 'enemies' (Ar. *Hist. An.* 609a 4–610a 13), and an animal as large as the elephant will need a suitably large opponent.

4. Augustus' rhinoceros

Suetonius Life of Augustus 43.4

Augustus was also in the habit, if any animal which was unusual and worthy of study had been brought to the city, of displaying it outwith the normal days for the games, in a suitable public place; so he exhibited a rhinoceros in the Saepta, a tiger in the theatre and a snake fifty cubits in length in front of the Comitium.

COMMENT: This tantalising comment from Suetonius' life of the emperor Augustus is one of the few references to a rhinoceros in Rome outside the arena. The mention of the animal together with a tiger and a giant snake – presumably a python – suggests that all these animals were Indian in origin, and Gowers (1950: 67) proposes that they may have been a gift from an

Indian king. If Augustus' rhinoceros was Indian rather than African, it is possible that this was the animal that Strabo saw and described (above). Some have taken the passage to indicate that Augustus kept the rhinoceros permanently – it figures prominently in Ransmayr's *Die letzte Welt* (1988) – although Dio (LV.33.4) refers to a rhinoceros which fought an elephant in the arena at the end of Augustus' reign in 8 CE.

5. The rhinoceros in the arena

Roman bronze quadrans, 83–85 CE



Inscription: IMP DOMIT AVG GERM S.C.

COMMENT: The rhinoceros depicted on this coin, a copper *quadrans* worth one quarter of an *as* and the smallest coin in circulation, is not just any rhinoceros: it is a particular rhinoceros, the star attraction of the games held by the emperor Domitian in the mid-80s CE. Domitian's games are described by Martial in his *Liber de Spectaculis*, and he dwells on the rhinoceros, then an unusual sight at Rome, and its combats with a bull, a bear, a bison and a buffalo (*Spect.* 9 and 22). The animal is drawn from life: its lowered head and curled tail are characteristic behaviours of the white rhinoceros when agitated (Gowers 1950: 62); Martial describes (rather poignantly) the difficulty found by the trainers in goading the normally placid animal to fight. Large numbers of these low-value coins were struck, and Buttrey (2007: 110) suggests that they may have been scattered for the crowd at the games themselves, to commemorate the occasion. Images of the rhinoceros also appear on the contemporary Temple of Vespasian (Coleman 2006: fig. 21), and occasionally on the lead *tesserae* (tokens) used under the Roman Empire for admission to the games (Gowers 1950: 68).

Rhinoceroses had been seen at Rome previously, first at Pompey's triumph in 55 BCE, and then under Augustus (above), but Domitian's introduction of the animal to the games was plainly considered a great novelty, and even in the later empire they were never seen in the arena in large numbers (Toynbee 2013: 127). The mosaic of the Great Hunt at Piazza Armerina in Sicily includes a scene of a rhinoceros being captured for transport to Rome: it is standing in an inappropriately watery spot, but is calmly resisting the attempts of the hunters to pull it out with ropes.

Bibliography

- T.V. Buttrey, 'Domitian, the rhinoceros and the date of Martial's *Liber de Spectaculis*', *JRS* 97 (2007), 101–12.
- K.M. Coleman, *Martial: Liber Spectaculorum* (New York 2006).
- B. Cumming, *Egyptian Historical Records of the Later Eighteenth Dynasty* (Warminster 1982).
- K. Enright, *Rhinoceros* (London 2008).
- A. H. Godbey, 'The unicorn in the Old Testament', *American Journal of Semitic Languages and Literatures* 56.3 (1939), 256–96.
- W. Gowers, 'The classical rhinoceros', *Antiquity* 24 (1950), 61–71.
- W. Gowers, 'The classical rhinoceros again', *Antiquity* 25 (1951), 155.
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- K. Karttunen, *India in Early Greek Literature* (Helsinki 1989).
- O. Keller, *Die Antike Tierwelt* I (Leipzig 1909).
- C. Lavers, 'The ancients' one-horned ass: accuracy and consistency', *GRBS* 40 (1999), 327–52.
- C. Lavers, *The Natural History of Unicorns* (London 2009).
- L. Llewellyn-Jones and J. Robson, *Ctesias' History of Persia: tales of the Orient* (London 2010).
- D.W. Macdonald, *The Encyclopaedia of Mammals* (Oxford 2009).
- P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
- A. Nichols, *Ctesias: On India. Translation and Commentary* (London 2011).
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- C. Ransmayr, *Die letzte Welt* (Nördlingen 1988).
- O. Shepard, *The Lore of the Unicorn* (London 1930).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).

GIRAFFE

The tallest land animal and one of nature's most intriguing creatures, the giraffe (*Giraffa camelopardalis*) is a herbivore native to southern Africa, related to deer, antelope and other ruminants. Giraffes live in loosely formed herds or 'towers', ranging over grasslands and woodland and feeding primarily on acacia leaves, though they also graze grass and shrubs. Their extended necks and unusually long tongues allow them to browse tall and thorny plants, and the necks are also used in combat between males (Williams 2010).

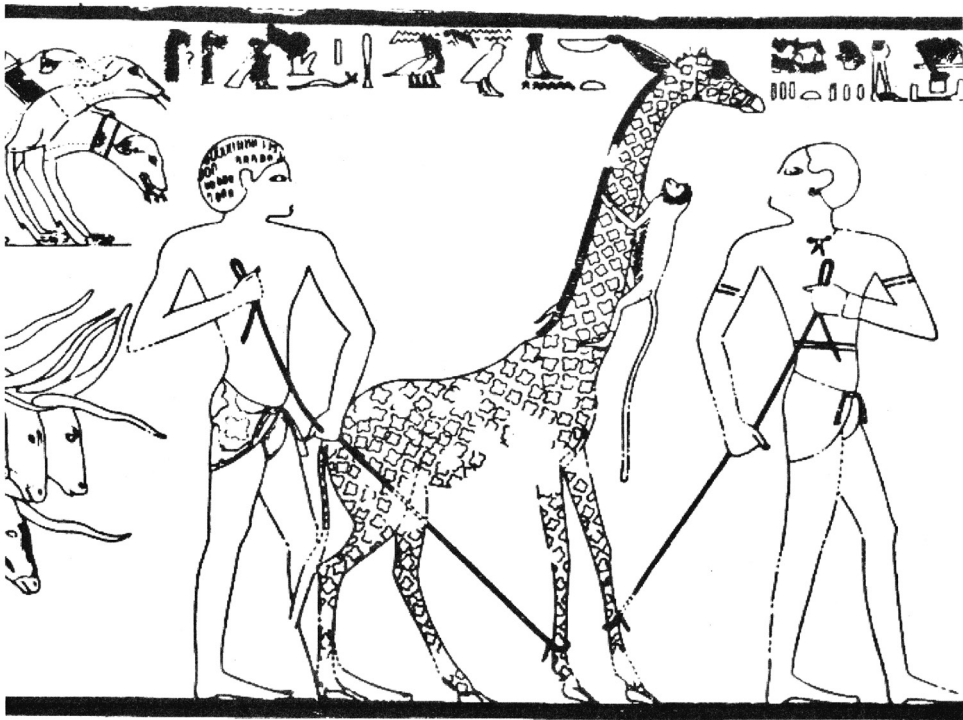
No written account of the giraffe survive from Egypt, presumably because it did not rank among sacred animals, but the giraffe was nevertheless among the earliest animal to receive a sculptured and pictorial representation (Laufer 1928). Giraffes were certainly common in Egypt in the prehistoric era, but by the early Dynastic age they had disappeared from the country, although their one-time presence is attested in rock carvings as well as in early vase paintings and ivory sculptures (Osborn and Osbornova 1998: 148–50; Williams 2010: 47). An early Dynastic slate palette carved in relief, from Hieraconpolis, shows the trunk of a palm-tree and two giraffes standing one on each side of it, apparently browsing (Houlihan 1996: 74 fig. 54; Williams 2010: 47). Giraffes were imported into Egypt from Punt (on the Somali coast?) as exotic show-species from at least the V Dynasty and they make quite regular appearances in tomb art tribute-scenes (below no. 1). Their hides and tails were high-status gifts.

As an animal of southern Africa the giraffe was unknown in the Near East, although remarkably it is listed as a kosher animal in the Hebrew Bible (Deuteronomy 14. 4–8; Leviticus 11. 2–8). The giraffe was also unknown in classical Greece; it was first described by the Hellenistic geographic writers, drawing on information from the Ptolemaic expeditions along the east coast of Africa, and a real giraffe walked in the Grand Procession of Ptolemy Philadelphus in the 270s BCE (Athen. 201c). Most accounts begin with an explanation of the ancient name, *camelopardalis*, describing how the giraffe combines the spotted skin of the leopard with the form of the camel.

Some elements of accurate observation are found: Agatharchides says that the long neck is used for browsing the tops of trees (Photius *Bibl.* 455b) and Oppian, drawing on the same Hellenistic sources, describes its short tufted tail and small horns (*Cyn.* 3.461–81). Only in Roman times were individual giraffes imported into Europe, though they remained very rare: the many confused literary descriptions or inaccurate drawings in antiquity indicate that they were not often seen. The giraffe's docile nature is no doubt one reason for a lack of interest among the Romans, who preferred ferocious animals for their entertainments.

1. Nubians with a giraffe and a monkey

Line-drawing based on an Egyptian wall-painting from the tomb of Rekhmire, Thebes, XVIII Dynasty c. 1504–1425 BCE

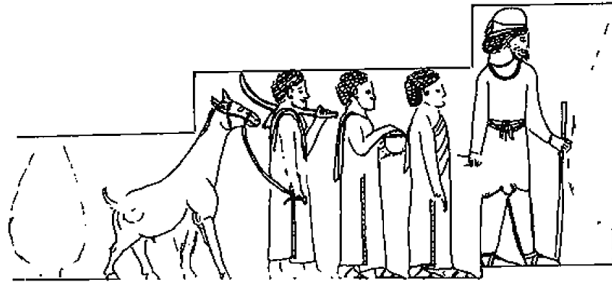


COMMENT: The giraffe was known to the Egyptians from earliest times and its image appears in hieroglyphs from the Old Kingdom, employed to denote the verbs 'to dispose', 'to foretell' and 'to arrange'. The earliest Egyptian word for the giraffe was *sr* (later the word *mmj* became more popular), which bears some relation to Ethiopic *zarat* and the Arabic *zarafa*, 'giraffe' (Vernus and Yoyotte 2005: 142–4). Oddly, in a demotic text (Saqqara Demotic Papyri I. 02), giraffes are counted among mountain animals: 'the house supervisor saw animals of the mountain which were numerous . . . giraffe, gazelle, hyaena, [. . .], deer, [corresponding (?) to] the beasts . . . the pharaoh sitting among the animals without them being able to see him.' But in reality, the giraffes known in Egypt came either from the Sahara or, more commonly, the Sudan.

Imported giraffes, often shown in Nubian tribute scenes (and occasionally in hunt scenes; Houlihan 1996: 45 fig. 35), are frequently found in Egyptian art, especially tomb paintings. They were employed as ‘garden pets’ for royalty and nobility (the skeleton of a male giraffe was discovered at the royal palace at Qantir in the Eastern Delta; Osborn and Osbornova 1998: 150; Houlihan 1996: 206). This well-known scene of a giraffe, with a monkey scurrying up its neck, comes from the tomb of the vizier Rekhmire. In fact, several Egyptian representations of the giraffe link the animal with a monkey, but ‘what this giraffine and simian combination symbolizes is unknown; the monkey could be added simply to emphasize the tree-like neck of the giraffe’ (Williams 2010: 48). The giraffe is well rendered, except for the fact that the artist has mistakenly shown the animal’s lower legs as spotted (they should be white). The giraffe is hobbled by the use of two ropes by the two Nubians who are tasked with showing the animal to Rekhmire, and its size, together with the shortness – almost absence – of its horns, suggests that it is a young specimen, and therefore more easily controlled. Giraffe hides were precious trade commodities too, as were their tails, often used as fly-whisks. The Middle Kingdom classic *Tale of a Shipwrecked Sailor* records the trade in giraffe tails: ‘Then he (the Island’s lord) gave me a load of myrrh, *hknw*-oil, laudanum, *hsyt*-spice, *tispss*-spice, perfume, eye-paint, giraffe tails, great lumps of incense, elephant tusks, hunting dogs, long-tailed monkeys, baboons, and all kinds of precious things.’ The thick coarse hair of a giraffe’s tail was also used as string for threading beads and creating jewellery (Fletcher 2000: 495).

2. Giraffe, nilgai or okapi?

East staircase of the Apadana, Persepolis, Iran c. 500 BCE



COMMENT: Carved into the bottom corner of the eastern staircase of the Apadana staircase at Persepolis is this depiction of a giraffe-like animal being led on a bridle tether by a delegation of Nubians, who also carry ivory tusks as they pay tribute to the Persian Great King. Several details might point to its being a giraffe (Afshar, Dutz and Taylor 1974): its tail is accurately rendered and the horns are in the correct position, though they are short (perhaps indicating its youth) and pointy. The animal has a face like a giraffe’s but the body seems too heavy, the limbs and neck too short, the hooves too large. The artists who carved this relief might have been unfamiliar with the giraffe and were also forced to improvise; they also were required to fit the tall and graceful creature into a very limited space at the bottom of the staircase. This would explain the unusually short neck.

It has been suggested by other scholars, however, that the animal is a nilgai (*Boselaphus tragocamelus*), an Indian antelope which certainly has many of the physical features (horns, ears, mane, tail) included on the bas-relief (see DEER/ANTELOPE no. 6). But why would African delegates bring with them an Indian animal as tribute? Valdez and Tuck (1980 and 1989) suggest, somewhat fancifully, that the Nubian delegates purchased a local Asian animal for tribute

while Sehm (1991) argues that nilgai bones have been found in Jordan and that the Ethiopians may have come to Iran via the Red Sea coast of Arabia, where the nilgai could have been found.

It is more possible that the animal represented here is an okapi (*Okapia johnstoni*) (Sprague de Camp 1963; Hampe 2001; Valdez and Tuck 1980 and 1989) though it must be conceded that this very shy and highly elusive creature is extremely difficult to transport and maintain in captivity. Unknown to Westerners before its ‘discovery’ in 1901, we now know that the okapi used to live in Uganda and possibly even to the north of it, making it feasible that Nubians captured this rare (and beautiful) animal as a fittingly exotic tribute for the Persian ruler. Scholarly debate has not yet reached a consensus as to the Persepolis animal’s identity, but perhaps the okapi is the best candidate (Tourovets 2001; Williams 2010: 50).

3. Giraffes at Rome

Dio Roman History XLIII.22.3–23.2

[Caesar] put on beast hunts and staged battles in honour of these buildings and of his daughter [Julia], on such a scale that if one wished to list them, the length of the description would seem to be untrue: for games of this kind are always the subject of exaggeration. So I shall pass over these and other events which took place later, except for anything which seems essential to relate: I will speak about the creature called the *camelopardalis* (giraffe) because it was first brought to Rome and exhibited on that occasion. The animal is like a camel in other respects, apart from the fact that its hindquarters are low, for its hind legs are rather short and its back slopes upwards from the rump to a great height, and it supports the whole of its body on its front legs, with a very long neck. Its hide is spotted like a leopard, and from this it takes its name.

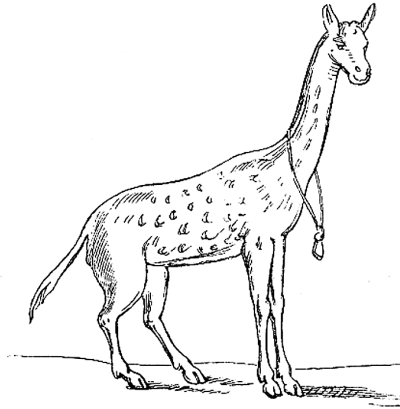
COMMENT: Dio’s careful description of the giraffe demonstrates the impression made on him by the animal when it was shown at Caesar’s triumph in 46 BCE, and its appearance left a trace in several writers, including Varro who introduced the word *camelopardalis* into his *De lingua latina* of 43 BCE. Pliny, who also notes its first appearance, is more dismissive, noting its lack of ferocity which made it unsuitable for the arena (NHVIII.69). His comment that this led to its being named ‘wild sheep’ indicates a fundamental lack of familiarity with the animal, especially as he fails to mention the length of its neck. He suggests that giraffes were subsequently seen ‘from time to time’ at Rome, and a reference in Horace to the giraffe as a curiosity in the 20s BCE (*Ep.* 2.1.195–6) suggests that one may have appeared in Augustus’ triumph of 29 BCE. The emperor Commodus was as usual the first to kill a giraffe in the arena (Dio LXXIII.10.3), and they are recorded at shows under Gordian III (SHA *Gord.* 33.1) and in the triumph of Aurelian in 274 CE (SHA *Aurel.* 33.4). After this point there are no further references to giraffes imported into Rome, though Gatier suggests that they retained some importance as diplomatic gifts from African rulers to Roman emperors (Gatier 1996).

Varro says that the first giraffe was brought from Alexandria (*Ling.* 5.20), and this was no doubt the source of all those which found their way to Rome; unfortunately we have no references in either art or literature to the transport of these creatures, though the difficulty of caging and sea transport leads one to speculate that young giraffes might have been captured as easier to manage (Gatier 1996: 913–14). Once on Italian shores they could be pastured without too much difficulty, and that they were kept as menagerie beasts seems certain; no giraffe bones have been found in Italy to date, but this must reflect the infrequency with which they were imported (MacKinnon 2006: 15–19). In 2014 initial reports from the University of Cincinnati excavations at Pompeii

raised the intriguing possibility of a giraffe leg bone found in the town, but subsequent analysis unfortunately proved the bone to be modern (article forthcoming, *Archaeometry*).

4. A tame giraffe

Detail of wall-painting from the columbarium of the Villa Pamphili, Rome (after Keller 1909: fig. 90)



COMMENT: This first-century BCE representation of a giraffe, one of a series of paintings from the *columbarium* of the Villa Pamphili, should not be taken as an indication that tame giraffes walked the streets of Rome: it forms part of a series of ‘Nilotic’ paintings, representing life in an idealised Egypt, like those of the House of the Faun in Pompeii (see HIPPOPOTAMUS no. 8). The giraffe figures alongside the crocodile, hippo and ibis as typically Egyptian fauna in Hellenistic paintings: on the Nile Mosaic of Palestrina two giraffes are naturalistically depicted, one reaching up to feed and the other lowering its neck to drink (Meyboom 1995: fig. 11). The giraffe had of course long vanished from Egypt, becoming localised to Southern Africa in prehistoric times (Meyboom 1995: 232), but it was regularly brought into the country as tribute from the tribes further south (above no. 1) and was thus connected in the Roman mind with Egypt. Because it was less familiar than many African animals, artists and writers sometimes erroneously ascribed its origin to India: it is occasionally represented in scenes of the Triumph of Dionysus (Toynbee 2013: fig. 65), and possibly among the Indian animals of the Great Hunt mosaic at Piazza Armerina (Gatier 1996: 931), and the *Geoponica* makes the same mistake (XVI.22.9).

This giraffe wears a collar with a bell around its neck, indicating its domesticated status, as do several giraffes in Late Antique mosaics (Toynbee 1976; Gatier 1996: fig 3), showing that it was considered more as a prestige animal for display than a wild animal for hunting. Gatier (2005) notes a cluster of giraffes in Late Antique mosaics from the Roman East, and suggests that they derive from a single episode of the transport of giraffes from Alexandria to Constantinople as gifts to the emperor Anastasius in 496 CE.

Bibliography

- A. Afshar, W. Dutz and M.E. Taylor, ‘Giraffes at Persepolis’, *Archaeology* 27.2 (1974), 114–17.
J. Fletcher, ‘Hair’, in P.T. Nicholson and I. Shaw (eds.), *Ancient Egyptian Materials and Technology* (Manchester 2000), 495–501.

- P.-L. Gatier, 'Des girafes pour l'empereur', *Topoi Orient-Occident* 6 (1996), 903–41.
- P.-L. Gatier, 'Les girafes de Gaza', in C. Saliou (ed.), *Gaza dans l'Antiquité Tardive. Archéologie, rhétorique et histoire* (Salerno 2005), 75–92.
- O. Hampe, 'Das Okapi von Persepolis: erstes Dokument von *Okapia johnstoni* (*Artiodactyla Giraffidae*)', *Archäologische Mitteilungen aus Iran und Turan* 33 (2001), 203–18.
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
- O. Keller, *Die Antike Tierwelt* I (Leipzig 1909).
- B. Laufer, *The Giraffe in History and Art* (Chicago 1928).
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Museion* 6 (2006), 1–25.
- P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- G. G. Sehm, 'Persepolis bluebuck out of the blue', *Cryptozoology* 10 (1991), 121–4.
- L. Sprague de Camp, 'Xerxes' okapi and Greek geography', *Isis* 54 (1963) 123–5.
- A. Tourovets, 'Nouvelles propositions et problèmes relatifs: l'identification des délégations de l'escalier est de l'Apadana (Persépolis)', *Archäologische Mitteilungen aus Iran und Turan* 33 (2001), 219–56.
- J.M.C. Toynbee, 'Graeco-Roman neckwear for animals', *Latomus* 35 (1976), 269–75.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.?, Barnsley 2013).
- R. Valdez and R.G. Tuck Jr., 'On the identification of the animals accompanying the "Ethiopian" delegation in the bas-reliefs of the Apadana at Persepolis', *Iran* 17 (1980), 156–7.
- R. Valdez and R.G. Tuck Jr., 'Persepolis: nilgai, not okapi', *Cryptozoology* 8 (1989), 146–9.
- P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
- E. Williams, *Giraffe* (London 2010).

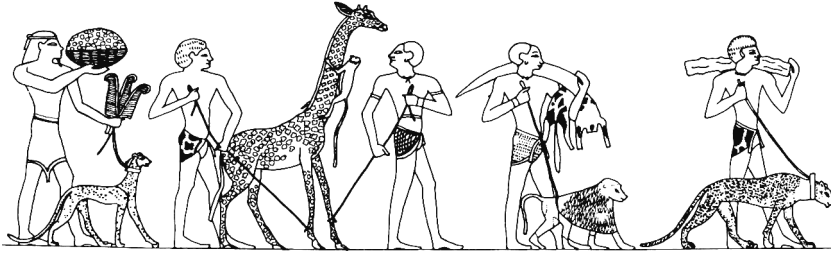
CHEETAH

The cheetah (*Acinonyx jubatus*) is native to sub-Saharan Africa and southwestern Asia, but is more closely related to the New World puma and jaguarundi than to Old World big cats. Today the cheetah is considered very distinctive, with tall legs and slender body to give it speed, spotted coat and characteristic dark streak under its eyes which help protect its vision from the glare of the sun. In antiquity, however, the cheetah was regularly confused with the leopard, and it can be difficult to interpret references in literature. The Egyptian language is nebulous in its appellation of 'leopard' (*ḫby*, *ḫby šm*, *b3*, *b3 šm*) and 'cheetah' (*ḫby ml*, *b3 ml*, *nt(y)t*, *m3fdt* (?)), and a similar confusion enters into biblical Hebrew – see Habakkuk 1.8 where a horses are described as 'swifter than leopards', although clearly the cheetah is meant (Castel 2002). It is possible that ancient Egyptians understood the leopard and the cheetah as the Upper and Lower Egyptian versions of the same animal. Similarly neither Greek nor Roman writers made any real distinction between leopards and cheetahs, and a variety of names were used to refer to them: in Greek *pardalis* and *panther*, the latter of which was taken over as the Latin *panthera*, but later superseded by *pardus*. *Varia*, spotted beast, is also found in Latin, but despite attempts by modern scholars, the names cannot be reliably identified with particular species today (Kitchell 2014: 147).

The evidence of art, on the other hand, is invaluable in the case of the cheetah, since very recognisable representations show that they were tamed in Egypt (though not domesticated, since cheetahs will not breed in captivity) and exported from there to the wider Mediterranean. In Egypt and the Near East they were used for hunting (see HUNTING no. 12), but the Greeks adopted them simply as expensive pets.

1. Cheetah as exotic tribute

Line drawing based on a wall-painting from the tomb of Rekhmire at Thebes, Egypt, XVIII Dynasty, reign of Amenhotep II



COMMENT: The tomb of the vizier Rekhmire shows an extraordinary array of African luxury objects being brought to the pharaoh's court: ivory, apes and monkeys alongside a giraffe, animal hides and ostrich feathers. The artist carefully distinguishes between the cheetah (far left) and the leopard (far right). The cheetah's light upright frame (and 'arrogant air', according to Castel 2002: 22) and the prowling, stooped neck of the leopard are clear to see. Textual evidence reveals that the cheetah was not native to Egypt (contra Houlihan 1996: 91) but was captured and brought into Egypt from beyond the Nile's second cataract in Nubia. The hunting of this cat was not commonplace and even though there are instances where cheetah skins are clearly being sent as tribute to the pharaoh, most representations show cheetahs presented as living gifts. The first depiction of a cheetah occurs in the Middle Kingdom. The sublime beauty of leopards and cheetahs was frequently lauded in jewellery designs and other costly items such as thrones, beds and trinket boxes. Images of the heads of both felines were incorporated into girdles worn by women and a particularly fine example belonging to a princess named Sithathoryunet was found with the rest of the princess' jewellery in her tomb at Lahun (Arnold 1995: 19).

2. A 'dappled dog' from India

*Old Babylonian copy of a Sumerian cuneiform text
(after Hallo 2003: 395)*

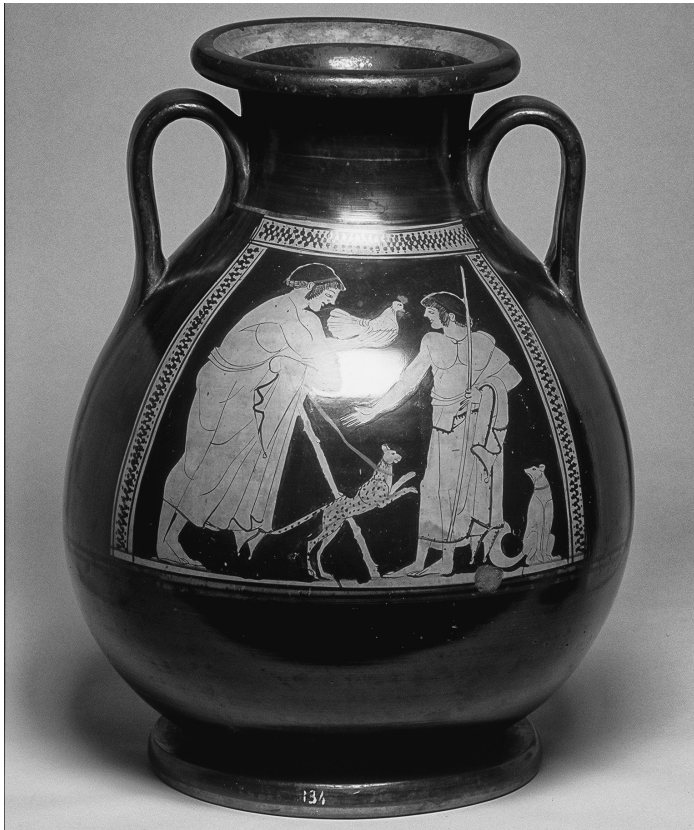
For Nanna, the impetuous bullock of Heaven, the lord who is first-born son of Enlil, his master, Ib-bi-Sin, the god of his nation, the mighty king, the king of Ur, the king of the four heavenly quarters — (of) a 'dappled dog' of Meluhha (= India ?) that had been brought to him as tribute (or: as a diplomatic gift) from Marhashi (in Iran) he fashioned its image and made a votive offering of it to him (Nanna) for the sake of his (Ib-bi-Sin's) (long) life. Of the 'dappled dog' — 'Let him catch (the enemy)!' is its name.

COMMENT: This fascinating Neo-Babylonian votive text is a copy of a much earlier document — a clay tablet of a royal inscription of neo-Sumerian date. It was originally carved on a now-lost sculpture of an exotic animal. But what was it? Hallo (2003: 395) suggests that from its appellation 'a dappled dog', it was a leopard (Akkadian *dumānu*, *nimru*). Large felines were often ascribed in Sumerian times to the taxonomic category we would regard as canine: in Sumerian a lion was

termed 'a grand/impressive dog'. But while a leopard is possible, in the light of the animal's Indian origin and the fact that it was transported into Mesopotamia from Iran, a cheetah (Akkadian *mindinu*, *senkurru*) is far more likely. The name of the animal, 'Let him catch (the enemy)', suggests a feline that could be trained to hunt, an idea which suits the cheetah more than the leopard. In modern Persian, the word for 'cheetah', *youz palang*, can, confusingly, be translated literally as 'Greyhound-Leopard' or 'Hunting-Leopard' (Humphreys and Kahrom 1995: 89).

3. Pet cheetahs in Athens

Attic red-figure pelike, Boulogne-sur-Mer, Musée Communale 134, attr. Tyszkiewicz Painter, c. 480 BCE. Photograph courtesy Collection Musée de Boulogne-sur-mer, © Philippe Beurtheret



COMMENT: This Attic pelike, with its scene of a lover offering gifts to his beloved, is one of a small number of fifth-century pots which appear to show exotic felines as pets in classical Greece. The lover leans on his staff as he offers a fighting-cock to the young man, whose dog sits at his feet, and he holds on a leash a spotted animal which can only be a cheetah. We have no references in literature to the keeping of cheetahs as pets in Athens, but the existence of a group of similar scenes, all dating to the early fifth century, suggests that painters were commenting on a genuine novelty (Ashmead 1978). The identification of these felines as cheetahs has proved controversial:

this example, with its rounded head and ears and lithe build, is one of the most convincing, while others are more canine in appearance (Ashmead 1978: fig. 11); all, however, are spotted. That tame cheetahs could have been introduced to Athens is entirely possible, as they were known from Egypt, and the pictures accord with this interpretation in that the animals are depicted being displayed and shown off; they would have been very expensive, since tame cheetahs have to be caught as cubs and reared with humans – they cannot be bred as pets. Calder (2011: 88) wonders if the pot painters' interest in fact exaggerates an isolated instance or short-lived fad among the Athenian aristocracy.

Bibliography

- D. Arnold, 'An Egyptian bestiary', *The Metropolitan Museum of Art Bulletin* 52.4 (1995), 1–64.
 A. Ashmead, 'Greek cats: exotic pets kept by rich youths in fifth-century BC Athens as portrayed on Greek vases', *Expedition* 20 (1978), 38–47.
 L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
 E. Castel, 'Panthers, leopards and cheetahs. Notes on identification', *Trabajos de Egiptologia* 1 (2002), 17–28.
 D. Engels, *Classical Cats: the rise and fall of the sacred cat* (London and New York 1999).
 W.W. Hallo, *The Context of Scripture* (3 vols) (Leiden and Boston 2003).
 P. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 P.N. Humphreys and E. Kahrom, *The Lion and the Gazelle. The Mammals and Birds of Iran* (Abergavenny 1995).
 K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
 D. Morris, *Leopard* (London 2014).

TIGER

Immediately recognisable by its distinctive deep orange and black striped coat (no two tigers have the same markings), the tiger (*Panthera tigris*) is the world's largest feline. Tigers once occupied a territory which stretched from China to eastern Turkey, including the riverine jungles of northern Iran, which were inhabited by the now-extinct Caspian tiger (*P. tigris virgata*). Today the territory of the tiger has been catastrophically reduced, with fewer than 4,000 individuals in isolated strongholds primarily in India and southeast Asia. Hunting mainly by night, tigers feed on deer, wild pigs and cattle, but they will eat monkeys, birds, reptiles, fish and, indeed, humans too. Tiger attacks even on rhinoceroses and elephants are not unknown. Usually solitary, tigers are not anti-social – they will travel in small groups and family units (Green 2006).

Tigers appear only very occasionally in Hittite and Mesopotamian texts and then only in animal lists, which provide little or no evidence beyond a name. Indeed, the Akkadian words that scholars sometimes associate with the tiger (*mindinu*; *dumāmu*; *senkurru*) are perhaps best translated 'cheetah'. Tigers are likewise entirely absent from the Hebrew bible (it is quite possible that they were known to the authors of the New Testament, yet they still are not mentioned; this contrasts with the early and constant appearance of the tiger in the arts and literatures of India and China). Classical authors occasionally refer to the tiger, but their knowledge was at best hazy: Aristotle, for instance, seems to use the word when actually meaning wild dogs or jackals (*HA* 607a 3–8; *GA* 746a 35). The first and only tiger reported in Greece was sent to Athens by Seleucus I (below no. 2), although no contemporary descriptions survive. At Rome tigers were first presented to Augustus in 20–19 CE by an embassy from India (Dio LIV.9.8), and Pliny notes the first to be exhibited a few years later (*NH* VIII.65). In both Latin and Greek *tigris* is usually a feminine noun, and tigers in Roman art are very often shown as female, both facts suggesting that the tigers seen at Rome were usually tigresses, which were easier to catch and to tame.

From the time of Augustus there are infrequent references to the import of tigers, and as they became better known tigers found their way into the Roman imagination: they became a standard comparison for ferocity (Pliny *NH* XI.4; Virg. *Aen.* IV.367; Ov. *Met.* VII.32), and Tigris appears as a name for both dogs (see WORKING ANIMALS no. 5) and a racehorse, presumably in both cases for an animal with stripes (Toynbee 1948: 29). The numbers imported, however, were always low: in the later empire the appearance of ten tigers in the arena is recorded on two occasions (Dio LXXVI.7.5; SHA *Gord.* III 33.1), but the claim that the emperor Elagabalus killed fifty-one tigers in the arena is rejected as unlikely by Meyboom (1995: Appendix 4), who notes the difficulty of finding so many of an essentially solitary animal, suggesting that they may in fact have been African cheetahs.

In Roman art many scenes of tigers depict the tall tales told about hunting (below no. 3), and while they are unusual in arena scenes, they figure in exotic landscapes and settings, such as the Great Hunt mosaic at Piazza Armerina and the Lod mosaic (front cover). A silver figurine (originally the handle of a jug) from the Hoxne Hoard, Suffolk, buried in the fifth century CE depicts a leaping tigress, and illustrates the penetration of knowledge of the tiger to the farthest parts of the Roman empire (London, British Museum 1994, 0408.30; Johns 2009: 30).

1. The earliest Greek account of an Indian tiger

Ctesias F45dβ (= Aelian On the Nature of Animals IV.21)

There seems to be an Indian beast of irresistible strength which is the size of the largest lion, red in colour like cinnabar, and as hairy as a dog. In Indian it is called the *martichora*. It has a face that more closely resembles a man than a beast. It has three rows of teeth on its upper and lower jaws which are very sharp on their serrated edge and larger than a hound's. Its ears also look to be human in shape, but they are larger and hairy. It has blue eyes which also look human. I think its feet and claws resemble those of a lion. The stinger of a scorpion is attached to the tip of the tail which is a cubit long and has barbs on either side. The tip of the tail pricks its victim when close at hand and instantly kills him. If someone pursues it, then it discharges its stingers horizontally like arrows and can shoot them very far. When it unleashes its stingers toward the front its tail bends back, and when it aims them toward the rear it stretches its tail out flat like the Saka. Whatever it hits it kills, with the exception of elephants. The stingers used for shooting measure one foot in length and are as thick as a rope. Ctesias claims and maintains that the Indians corroborate this, that in place of the discharged stingers a new one grows as if it were the offspring of this dreadful item. As Ctesias himself says, it is especially fond of human flesh and it kills many [men]. It does not lie in wait for one person, but chases after two or three and vanquishes all of them by itself. It prevails upon the rest of the animal kingdom, but could never overpower a lion. This animal takes great pleasure in having its fill of human flesh living up to its name, for the Indian name in Greek means 'man-eater' and is so-called from this habit. It is as swift as a deer and the Indians hunt their young before they develop a stinger and smash their tails with stones so they are never able to grow them. It emits a sound most closely resembling that of a trumpet. Ctesias claims to have seen one such creature which was brought to the Persian king as a gift, if he is a credible witness about these matters.

COMMENT: This, the earliest Greek description of a tiger, was written by Ctesias of Cnidus, who was resident at the court of Persia for some seventeen years (Llewellyn-Jones and Robson 2010). It appears that Ctesias preserves some genuine Persian thoughts about the tiger (as he does

about the parrot and the rhinoceros). Indeed, *martichora* may have derived from the Old Persian words *martiya-* ('man') and *khordēh* ('eating') (compare the modern Persian for 'tiger', *mard-kwār*). Ctesias no doubt acquired his information from a Persian source, perhaps via an Indian informant, although his claim that he had seen a living tiger which was brought to the Persian court as an Indian tribute to the Achaemenid monarch is highly probable.

There is no doubt that the *martichora* should be interpreted as a tiger (see Pausan. IX.21.4; Plin. NHVIII.75; Nichols 2011). Even the seemingly incredible account of a 'stinger' at the tip of the tail can be qualified: a tiger has a tiny dermal nail-like protrusion on its tail, and this is what Ctesias describes. Moreover, the carnivorous molar of the tiger has three lobes thereby encouraging the belief that the *martichora* had three rows of teeth. Many other aspects of Ctesias' *martichora* are, however, purely fantastical, such as its ability to fire its stingers, its trumpeting sound and its human-like face. Ctesias may have supplemented genuine observation and *bona fide* Indian accounts with fanciful speculations drawn from the monumental artistic images which surrounded him at the Achaemenid court where hybrid creatures (including lions with scorpion-tails) were frequently depicted.

2. The first tigers seen by Alexander

Quintus Curtius Rufus History of Alexander IX.8.1–2

The Indian ambassadors, having been sent home, returned a few days later with gifts. There were three hundred horsemen, one thousand and thirty chariots, each drawn by four yoked horses, a quantity of linen cloth, a thousand Indian shields and a hundred talents of white iron. There were also lions of unusual size and tigers, both animals tamed to gentleness, the hides of great lizards and tortoise shells.

COMMENT: Both Curtius Rufus and Arrian record the embassy sent to Alexander by the Mallians and Oxydracae, Indian tribes, after the battle at the town of the Mallians in 326/5, though Arrian's account (*Anab.* VI.14.1–3) is less detailed. The gifts listed here evidently represent distinctive native products – the 'linen' cloth being cotton, and white (or polished) iron perhaps steel, the making of which was an Indian specialism. The tame tigers presented to Alexander would make him and his men the first Europeans to see a tiger, although there is no further indication that the animals were taken back to Babylon: Nearchus, Alexander's general who wrote an account of his explorations, claimed only to have seen a tiger's skin, not the animal itself (*Arr. Ind.* XV.1–3). In the next generation of Successor kings Seleucus, who had taken over the eastern part of Alexander's empire, sent a tiger to Athens (*Athen.* 590a–b), having presumably received it as a gift himself from the Indian rulers; his motivation in sending it is not recorded, but the tiger was obviously exhibited for long enough in public to become proverbial. Other Successor kings did not secure them for their collections: no tigers appeared in the Great Procession of Ptolemy Philadelphus.

3. The tigress and the kid

Plutarch On the Cleverness of Animals (Mor. 974c–d)

And some animals cure themselves by abstaining from food, like wolves and lions, which, when they have glutted themselves on flesh, lie in peace and bask in the sun together. And there is a story that a tigress which was given a goat-kid to eat did not do so, but kept a fast for two days, on the third day, when she became hungry, looked for some other food, even breaking apart her cage, but she spared the kid, considering that it was now her cagemate and companion.

COMMENT: Plutarch's tale begins as an example of the ways in which animals treat themselves with remedies for various ailments, but ends as an illustration that animals can manifest feeling and emotion, overcoming brute instinct. The same story is told by Aelian (NAVI.2) of a leopard, specifically a tame one, and what is interesting about Plutarch's version is that it seems to envisage a tiger which is a permanent captive rather than a beast destined for the arena. Because tigers were so rare in the Roman world they do appear generally to have been exhibited as zoological specimens rather than sent to an immediate death: Augustus and Claudius are both said to have shown caged tigers (Pliny *NH*VIII.65), and Seneca, writing in the time of Nero, describes among instances of trained animals (including a tightrope-walking elephant) a tiger which could be kissed by its keeper (*Ep.* 85.41). Martial describes tamed tigers which could be driven in harness (*Ep.* I.104, VIII.26), and Jennison (1937/2005: 132–3) suggests that this may be evidence for an imperial animal collection. Tigers can be successfully kept in captivity, and if they were most usually caught as cubs (see below) the idea that they could be tamed seems more likely.

4. Admiration for the tiger

Oppian Cynegetica III.340–63

Next let us sing of the splendid form of the tiger,
The most beautiful sight of all wild beasts
Which skilful nature lays before our sight.
The tiger is as pre-eminent in beauty among the animals
As the lovely peacock among the birds of the air.
It is in looks in every way like the mountain-ranging lioness,
Except only for its pelt, decorated with varying colours
With cunning stripes and a gleaming sheen;
As the lion, it has eyes that blaze with fiery glance
Beneath its brows; it has the same strong
And powerful body, the same long bushy tail.
Its face and its frowning brow are the same,
As are its flashing teeth.
The tiger runs more swiftly than any other beast,
With the speed of its sire, the West wind;
Yet this is a myth: who could believe
That animals should mate with the wind as bridegroom?
It is an empty tale, that the race of tigers
Is only female, and does not mate with a male.
For you may often see the handsome consort with his varied colours
Though you would not easily capture him. For when he sees
The hunters, he forsakes his young, and flees with all his strength.
But the tigress follows her cubs in her distress
Straight into the hunters' nets, to their delight.

COMMENT: The third-century CE treatise on hunting attributed to Oppian is one of the few ancient texts to comment appreciatively on the tiger's impressive appearance, placing it as the most beautiful animal, and the description, comparing the tiger to the lioness, is plainly drawn from experience. The idea of the swiftness of the tiger goes back to Nearchus (above), though Oppian here rejects the story (told of many creatures in antiquity, including mares and vultures) that they

were impregnated by the wind. His reference at the end of the passage to the tigress who follows her cubs into the hunters' nets reflects the many unlikely stories told about ways to catch a tiger: according to Pliny (NHVIII.66) the hunter would steal a litter of cubs and, when pursued by the tigress, drop them one by one to distract her until he could escape on board ship with the rest. Toynbee illustrates artistic representations of this, and also the even stranger idea of the 'mirror-trap', in which the tigress is distracted from her pursuit by a mirror thrown down by the hunter, an idea which gained great prominence in medieval sources (Toynbee 2013: 72–81 and pls 23–4).

Bibliography

- S. Green, *Tiger* (London 2006).
 G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
 C. Johns, *The Hoxne Late Roman Treasure: gold jewellery and silver plate* (London 2009).
 L. Llewellyn-Jones and J. Robson, *Ctesias' History of Persia: tales of the Orient* (London 2010).
 P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
 A. Nichols, *Ctesias: On India. Translation and Commentary* (London 2011).
 J.M.C. Toynbee, 'Beasts and their names in the Roman empire', *PBSR* 16 (1948), 24–37.
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).

MONKEY

Monkeys are present in the archaeology, art and literature of every culture across the Mediterranean and Near East, and in all cases they were imported exotics. They were hugely popular as pets and appear early in ancient art. The identification of monkey species in antiquity can be confusing, both because ancient classifications do not necessarily map very easily on to modern ones, and because there is regular confusion today in the application of the terms 'monkey' and 'ape': true apes such as the chimpanzee and gorilla were unknown in antiquity (see no. 5 below). All the species encountered in ancient sources are members of the Cercopithecidae family, including monkeys, baboons and macaques (Greenlaw 2011: 1–6).

Monkeys are first attested in the Near East in a literary composition known today as *The Curse of Agade*, although the Sumerians knew it as *The Frown of Enlil*. Written around 2150 BCE, but set in the earlier reign of Naram-Sin (2190–54 BCE), the epic lists the animal-tribute brought to Akkad (Agade): 'monkeys, mighty elephants, water buffalo, exotic animals, thoroughbred dogs, lions, mountain ibexes, and *alum* sheep.' The monkeys (Akkadian *pagu*, *uqupu*; Sumerian *ugubi*) probably arrived from Meluhha, the Sumerian name for the Indus Valley; this is supported by a series of Old Babylonian terracotta plaques which depict, some scholars suggest, Indian rhesus macaques (*Macaca mulatta*) (Potts 1997: 259; Mendleson 1983; Greenlaw 2011: 35). By the Kassite period (sixteenth to twelfth century BCE) it is probable that monkeys were also imported into Mesopotamia from Egypt (as was certainly the case in the later Neo-Assyrian age) and from Saba (or Sheba, modern Yemen).

Two types of monkey are regularly found in the Egyptian sources: the green monkey (*Chlorocebus sabaeus*) (Egyptian, *gef*) and the hamadryas baboon (*Papio hamadryas*) (Egyptian, *iyān*), although archaeological excavation has also exposed evidence for the presence of the olive baboon (*P. anubis*) and the barbary macaque (*Macaca sylvanus*) (Greenlaw 2011: 7–41; see also Janssen and Janssen 1989: 20–6; Germond 2001: 87–90; Dunand and Lichtenberg 2005: 54–6). These latter species may have been depicted in Egyptian art, but identification of specific types in the artworks is hazardous. While it is possible that baboon troops were present in pre-dynastic Egypt, there is little evidence to support the notion that wild monkeys were common to pharaonic Egypt and the overwhelming impression obtained from the iconography is that monkeys were unusual imports

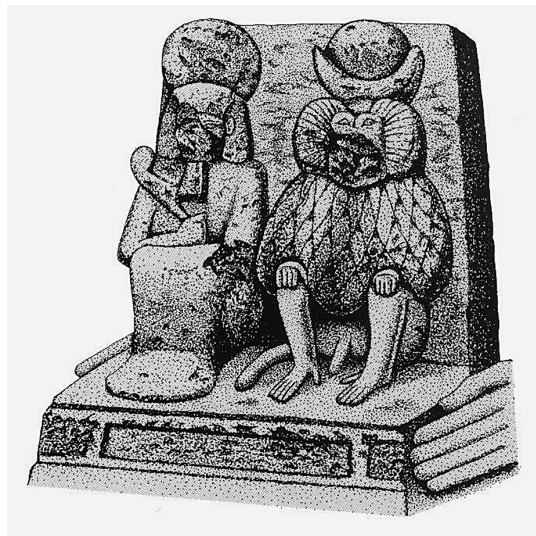
from foreign lands kept predominantly as high-status pets and possibly as working animals too (see WORKING ANIMALS no. 6). The Middle Kingdom classic, *The Shipwrecked Sailor*, records the exotic imports reaching Egypt from far-off lands: ‘myrrh, *hknw*-oil, laudanum, *khsyt*-spice, *tšps*-spice, perfume, eye-paint, giraffe-tails, great lumps of incense, elephant’s tusks, greyhounds, long-tailed monkeys, baboons, and all kinds of precious things’ (Lichtheim 1974: 214).

The earliest monkeys found in the Western Mediterranean are some of the most famous: the blue monkeys of Thera wall-paintings, dating to the mid-second millennium BCE. Long-tailed vervet monkeys (*Chlorocebus pygerythrus*) were very common as a theme in Minoan art, including the famous saffron-gatherers from Knossos (Preziosi and Hitchcock 1999: fig. 82; Greenlaw 2011: figs 74–6), but there is no indication that these were drawn from life: they were represented as blue because they were copied from the Egyptian artistic tradition (Greenlaw 2011: ch. 3; *contra*, Parker 1997, Strasser 1997). Monkeys are not mentioned by Homer or Hesiod, though Semonides, writing in the seventh century BCE, includes the *pithēkos* in his poem comparing women with animals (VII.71–82), with the implication that it was well known by this period; several monkeys appear on contemporary mainland and east Greek pottery (Greenlaw 2011: 66–7).

Attitudes towards monkeys in Greece were generally negative – they were seen as ugly and ridiculous – and the few references to pet monkeys tend to be late classical or Hellenistic (Herodas 3.40–1; Athen. *Deipn.* 519a). The Romans, however, were far more enthusiastic about them, and Barbary macaques were popular pets across the empire. Some monkeys were trained as performers, either alone (as on a first-century Roman lamp in the British Museum (inv. 1814.0704.79; Toynbee 2013: fig. 32), which depicts a man with a monkey and cat doing tricks) or as part of a troupe (Aelian describes a performance by costumed dancing monkeys at NA VI.10). The monkey’s imitative ability was well documented, but the view of monkeys as imperfect humans tended to colour attitudes towards them, with the result that many stories show them trying but ultimately failing to act in human-like ways (e.g. Ael. NAVII.21, XVII.25; Aesop 643 (Perry)).

1. Thoth in the guise of a Hamadryas baboon

*Red quartzite statue, reign of Amenhotep III, XVIII Dynasty,
c. 1386–49 BCE, possibly from Thebes*



COMMENT: The impressive and well-observed figure of this fully grown adult male hamadryas baboon with an impressive mane of hair (a display of his dominant status) depicts him crouching on a *naos*-pedestal bearing the names and epithets of Amenhotep III, who is seated next to him, while his fore-paws rest on his knees. His tail curves round and his penis is prominently displayed – a common feature in Egyptian representations of the baboon (Kozloff 1981: 69). In nature, the penis of the hamadryas baboon lacks a foreskin (a facet accurately portrayed in this statue) leading the Egyptians to believe that this animal was born circumcised. The Egyptians fixated on the baboon's penis in other ways: some statues of baboons were carved with holes in the penis through which water flowed at a regular rate, as a kind of water-clock. The 'urinating' phallus thus marked the hours, a result, it has been suggested, of the Egyptian belief that baboons urinated regularly, once every hour (Morris 2013: 13).

Found in all sizes and media, from miniature figurines to colossal statues and brightly coloured wall-paintings, baboons are among the most frequently depicted animals in Egyptian art and their importance to Egyptian culture cannot be over-emphasised. Baboons were regarded as a manifestation of the moon-god Thoth, Lord of Wisdom and patron of scribes and of the art of writing (Kummer 1995). The god could sometimes take on the shape of a baboon himself (as here – he wears the crescent moon on his head) but more usually it served as his representative. In many reliefs, wall-paintings and sculptures baboons are shown standing on their hind legs with their forearms raised in what appears to be a gesture of prayer or reverence because the Egyptians believed that baboons naturally greeted the rising of the sun every morning. A New Kingdom hymn describes the baboon's role:

The baboons that announce Re when this great god is to be born again about the sixth hour in the netherworld. They appear for him after they have come into existence. They are both sides of this god until he rises in the eastern horizon of the sky. They dance for him; they jump gaily for him; they sing for him; they shout out for him. When this great god appears before the eyes of [all humankind] then these hear the speech of jubilation of the *Wetenet*-country [= the baboons?]. They are those who announce Re in heaven and on earth.

(Houlihan 1996: 96)

The actions described in the hymn are accurate descriptions of real-life baboon behaviour. In the wild baboons are known to howl, scream, run and jump in the warmth of the morning sun, giving rise to the Egyptian belief that baboons greeted the new-born Re with singing and dancing. The Egyptians euphemistically referred to the baboon's howl as a 'hymn'.

2. Mummified monkey

Mummy of a young baboon from the temple of Khonsu at Thebes, Egypt, Late Period or Ptolemaic period, c. 600–200 BCE (London, British Museum E6736). Photograph © The trustees of the British Museum



COMMENT: This well-preserved mummy of a young baboon has been carefully constructed to give it a life-like sitting position. It is wrapped in linen bandages, although many are now missing, revealing the fur beneath. In recent investigations of the mummy, researchers compared the oxygen isotope values in the baboon to those found in its modern kin. The isotope value matched with baboons in Eritrea and Eastern Ethiopia, the possible locale of the ancient land of Punt. We know that baboons were imported into Egypt from Punt from at least the reign of Hatshepsut (1478–58 BCE) and at her mortuary temple at Deir el-Bahari, the queen had reliefs made depicting baboons climbing palm trees in Punt as well as baboons roaming free on the Egyptian cargo ships.

In the Late Period the cultic importance of baboons grew and clerics bearing titles like ‘Priest of the Living Baboon’ or ‘Priest of the Osiris-Baboon’ were found charged with the task of looking after temple monkeys and sacred troops of baboons, such as those at the Memphite temple of Ptah. There was no worship of monkeys *per se* in Egypt but from the Late Period they began to be deified after death and by the XXVI Dynasty sacred baboons were buried in the ibis necropolis near Tuna el-Gebel. In the Ptolemaic period they were regularly buried alongside ibises and falcons in almost every animal necropolis in Egypt. The highest-quality burials of monkeys are found in the well-documented baboon galleries of Saqqara, dating to the late Ptolemaic and early Roman eras.

Excavations of baboon mummies from various sites around Egypt reveal evidence for extensive breeding programmes. Sadly, many of the baboons that were bred and raised in captivity were not well cared for and their mummies display signs of rickets, tuberculosis and skeletal deformities, diseases caused by poor nutrition and lack of space. Their teeth were generally in a very poor state and many animals had had their canine teeth removed or snapped off. Many baboons died

young and it is possible that some were killed for the express purpose of mummification (on the average age of death for mummified baboons see Goudsmit and Brandon-Jones 2000: 116).

Recent excavations of the Late Period and Ptolemaic baboon catacombs at Saqqara have suggested that there was a shift in the main primate species being mummified in the Ptolemaic period which perhaps reflects an overall change in trade patterns: the Nile and Red Sea traffic which had for thousands of years brought baboons northward from Ethiopia, Sudan and Eritrea was replaced by Mediterranean traffic bringing barbary macaques from northwest Africa. Several Demotic texts found in the Saqqara baboon galleries suggests that around 175 BCE, monkeys even began to be imported into Egypt through the major port of Alexandria, brought there by Phoenician traders, although this lucrative new trade apparently stopped with the destruction of Carthage in 146 BCE (Goudsmit and Brandon-Jones 1999: 45, 53).

3. Monkeys presented as tribute

Gypsum wall panel (detail) from Nimrud (Kalhu), Iraq, North West Palace of Ashurnasirpal II, c. 865–860 BCE (London, British Museum 124562)



COMMENT: A Phoenician tribute-bearer brings a pair of monkeys, on leashes, to the court of the Assyrian monarch Ashurnasirpal II (we know from the royal annals that Ashurnasirpal received a large female monkey from Unqi in north Syria, which he put on display in his menagerie). This panel, part of the façade of the throne room, attests to the importance of animals as tribute during the Neo-Assyrian period, as demonstrated also on the Black Obelisk of Shalmaneser where distant provinces of the empire present their living booty – camels, elephants, rhinoceroses and monkeys – to the monarch, all no doubt bound for the royal menagerie.

The artists of the Nimrud panel seem to have difficulty with their depictions of the two monkeys (perhaps green monkeys or rhesus macaques, or even a rare depiction of the hanuman langur (*Semnopithecus entellus*)): they are well rendered, but have disturbingly human-looking faces (compare the monkey images on the Black Obelisk). Their ability to scamper on to the shoulders and head of their keeper, a common feature in the behaviour of rhesus macaques, is an affectionately observed detail on the part of the artists.

4. Monkeys in the early Mediterranean

Wall-painting, Tomb of the Monkey, Cerveteri, mid-fifth century BCE



COMMENT: The Tomb of the Monkey in the Etruscan cemetery at Cerveteri is richly decorated with wall-paintings depicting athletic competition at the funeral games of a wealthy woman, possibly the occupant of the tomb. It is named for the small tailless monkey which appears in the painting on its rear wall, sitting in a bush to one side of a scene of wrestlers; it is clearly a pet because it wears a collar and chain. Another pet monkey is depicted in the later Tomba Golini I in Orvieto, belonging to the aristocratic Leinie family; although the painting is now fragmentary, the monkey can be seen climbing a pole, with a red cord tied around its foot. We have no literature surviving from the Etruscan world to tell us about the origins and roles of monkeys, but from archaeology we can tell that images of simians were popular from the earliest times: Phoenician traders brought to Italy bronzes, amulets of ivory and amber, and jewellery, all carrying decoration of standing or sitting monkeys (Rebuffat-Emmanuel 1967), and the Etruscans soon began to produce vases and statuettes of their own based on African and Eastern models. Greenlaw depicts an Etrusco-Corinthian aryballos in the form of a mother monkey holding her baby, both wearing collars (2011: fig. 80), so we can assume that actual monkeys were appearing by the sixth century BCE, and by the time of the tomb-paintings were common as entertaining pets for the wealthy.

5. The physiology of the monkey

Aristotle, Historia Animalium 502a 16–b 27

Some animals are in nature in between humans and quadruped animals, such as monkeys (*pithēkoî*), *kēboi* and baboons. The *kēbos* is a *pithēkos* with a tail. Baboons are similar in form to monkeys, except that they are larger and their faces are more doglike; they are fiercer and have strong teeth like a dog's. Monkeys have hairy backs like other quadrupeds and likewise hairy fronts like other anthropoid creatures (for humans and quadrupeds are opposites in this respect, as I noted earlier). But the monkey's hair is very thick, so they are very hairy both front and back. They have faces which are similar in many ways to humans'; for the ears and nostrils are very human in appearance, as are the teeth, both front teeth and molars. And while other quadrupeds do not have eyelashes on their upper lids, monkeys have very fine lashes on both, though they are very small, and finer on the lower lid. Other quadrupeds, however, do not have these at all.

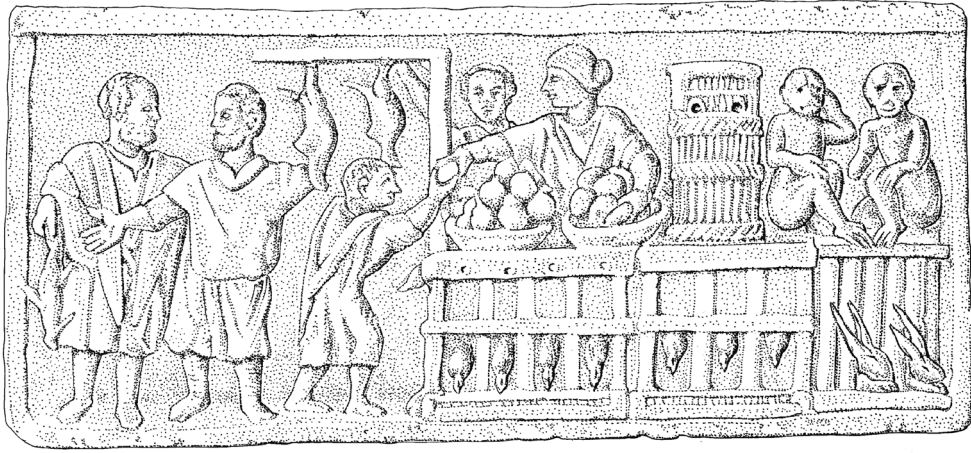
Furthermore, the monkey has two small breasts with nipples on its chest. Its arms are human in form, though hairy, and its joints on both arms and legs articulate as human ones do, with the rounded parts of the limb towards each other. Monkeys also have hands, fingers and nails of human form, except that they are more beastlike. The feet, however are different; for they are like large hands, with toes like fingers, the middle one being the longest: the lower part of the foot is like a hand, though considerable longer because it stretches out like a palm, and it has a harder part at the end like an ill-formed heel. Monkeys use their feet as both hand and foot and can clench them like a hand. The upper arm and thigh are short compared to the forearm and calf. They have no obvious navel, but the region where the navel would be is hard. The upper part of the body is much larger than the lower, as with all quadrupeds, in a proportion of about five to three. Because of this, and because it has feet which are like hands . . . the monkey usually walks on all fours rather than upright. It is like a quadruped in that it has no buttocks, but like a human in that it has no tail, or at any rate only a very small vestigial one. The female monkey has genitals like those of a woman, but the male's are more doglike than human. The *kēbos*, as noted above, does have a tail. All kinds of monkey, when dissected, can be seen to have internal organs like those of humans.

COMMENT: Aristotle was the first to categorise monkeys into three classes, and later writers broadly follow his classification: the primary distinction made was between tailless monkeys (*pithēkoî*) and those with tails (*cercopithēkoî*), with baboons (*cynocephaloî*) clearly differentiated from both. The *pithēkos* described here is plainly the Barbary macaque, known in Greece since the seventh century BCE, and most probably imported from North Africa. Aristotle's very detailed description includes observation of monkeys' behaviour as well as appearance, for example on the use of the foot, and he emphasises throughout the similarity of the monkey's form to the human. His final comment, on the internal organs of monkeys, is our earliest evidence that dissection was practised on them; in the Roman period this practice was taken much further. Galen, in his treatise *On Anatomical Procedures*, recommends that physicians carry out intensive dissection of monkeys, because they are an accessible analogue to humans (*De Anat.* III.5). His works include considerable detail of the distressing treatment of monkeys in dissection and vivisection: he recommends that they be drowned or suffocated in preparation for use, to prevent damage to their internal structures (I.3), and at times they were starved to emaciation before death to allow their organs to be more clearly seen (XI.3, *De loc. aff.* V.7). Some particularly unpleasant passages record

demonstrations of dissection performed on live monkeys, including the exposure of the intestines and heart, and ligation or severing of arteries (VII.2, *Opt. Med. Cogn.* IX.6). Most striking are Galen's comments on the dissection of the living brain (IX.18–19), where he advises against using monkeys in demonstrations, partly for practical reasons (pigs or goats will cry out with louder voices, making the demonstration clearer), but also for aesthetic ones: the similarity of a monkey's expression to a human one as it suffers, he says, is unsettling.

6. Pet monkeys at Rome

***Marble relief from Via della Foce, Ostia, late second century BCE,
Museo Ostiense inv. 134 (drawing by Tessa Rickards)***

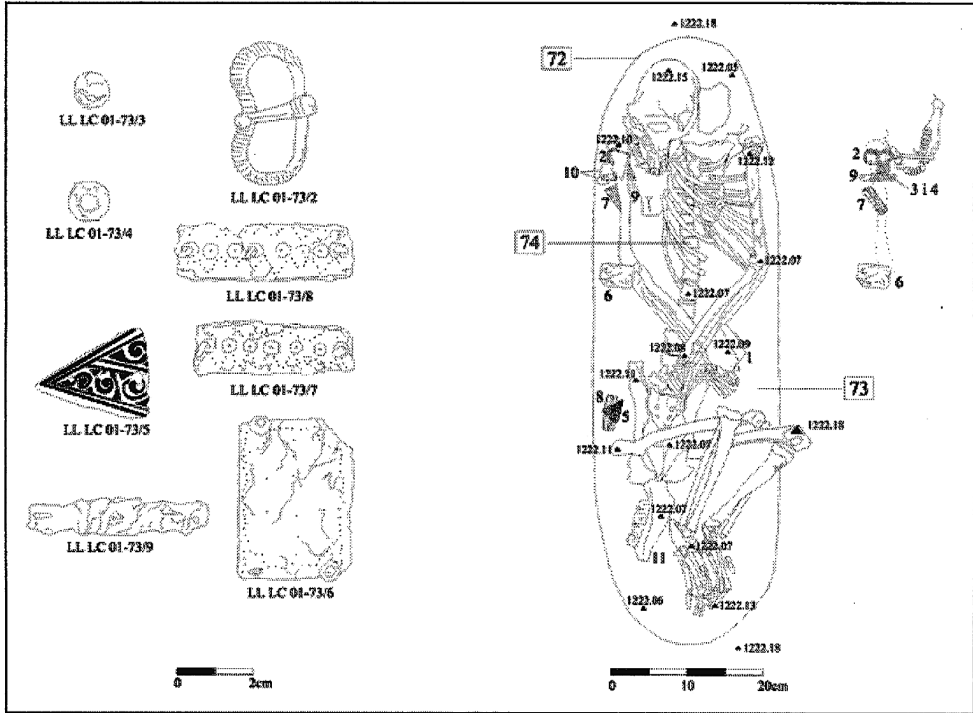


COMMENT: The relief from the Via della Foce in Ostia above is thought to be a shop sign, and carries a surprisingly detailed depiction of the inside of a grocer's shop. A woman stands behind a counter on which are baskets of figs and apples, and a tower of wicker baskets, perhaps containing snails: below are cages from which the heads of live chickens and hares peek out (see also HARE, SNAIL no. 3). Fowl hang from a frame while customers gossip and gesture. Most remarkably, at the right of the counter two monkeys sit looking out at the viewer: one scratches its head. It seems clear that the monkeys are not for sale as food – they are not caged or chained – and the only Roman reference to eating monkeys comes in the form of a joke (Phaedrus 3.4 = Aesop 496 Perry). Their role instead seems to be as entertainment to attract custom (see also CROW no. 5), and the image implies that monkeys were not pets solely for the rich; Pliny *NH* VIII.216 refers to tame house monkeys which show pride and affection for their babies, implying that they were both common and inexpensive to acquire.

Pet macaques were very common (see for example Martial *Ep.* VII.87 = PETS no. 12), and Cicero also mentions a pet baboon (*Ad Att.* VI.1.25). Other monkey species mentioned by Roman authors, such as the *satyros* and *callitriches* (Plin. *NH* VIII.216), remain mysterious to us, and attempts by modern scholars to identify these with exotic species such as the orang-utan only muddy the waters further (see Kitchell 2014: 165). Those who kept pet monkeys, however, became a target for moralists: the story of the king who sees men carrying monkeys and asks 'Do your women bear no children?' is attributed to both King Massinissa of Mauretania (Athen. *Deipn.* 518f) and the emperor Augustus (Plut. *Per.* 1.1).

7. A military mascot

Skeleton of Barbary macaque from Llívia (Iulia Libica), Spain, fifth–sixth century CE (drawing reproduced by kind permission of Prof Oriol Olesti Vila)



COMMENT: A macaque skeleton was among the fauna found at Pompeii (King 2001: 434), and Romans clearly took their pets with them when they travelled too: the remains of Barbary macaques have been found at Roman sites across the empire, including France (Poitiers), Britain (Wroxeter, Catterick, Dunstable) and Germany (Rainau-Buch). This macaque, however, which was found at Llívia in the eastern Pyrenees, seems to have been not just a pet, but a mascot for a military unit. The macaque was a male, about five and half years old, and had been carefully buried; in the grave were found a sheep's jawbone as a food offering, and several bronze plates and a buckle for a belt. The forms of the bronze items show that they were from military clothing, and suggest that the macaque was given a version of military uniform to wear – Olesti suggests that he was originally an officer's pet who became a mascot for the unit (Olesti et al. 2013: 715). Some striking comparative illustrations of monkey mascots belonging to military units in more modern times can be seen in van Emden's *Tommy's Ark: soldiers and their animals in the Great War* (2010).

That Roman monkeys were often given clothes to wear is plain from both art and literature: a wall-painting from the House of the Dioscuri in Pompeii shows a monkey wearing a white coat (King 2001: 434), while Martial refers to a monkey dressed in a cloak and Juvenal to a monkey performing with shield and helmet (Mart. *Ep.* XIV.128; Juv. *Sat.* V.153–5).

8. Apes in Africa?

Hanno the Navigator, Periplus 15–18

We rapidly sailed out and passed along the coast of a country all of fire and smoke, and from it great rivers of fire ran down into the sea. Because of the heat it was impossible to land, and so we sailed away in fear from there too. For four days as we sailed we saw by night that the land was full of flames, and in the middle was a huge pillar of flame, greater than all the rest, which seemed to reach up to the stars. In daylight this was revealed to be a great mountain, named ‘Chariot of the Gods’.

On the third day we sailed past more streams of fire, and came to a gulf called ‘Horn of the South’. In this gulf was an island like the first one we found, with a harbour and in this harbour was another island inhabited by wild people. Many of them were women with hairy bodies, which our interpreters called ‘Gorillas’. When we tried to capture them we could not catch any of the males, because they all fled, being very good climbers, and threw rocks at us, but we caught three of the females; these bit and scratched their captors and could not be brought to obey, so we killed and flayed them, and brought their skins back to Carthage. For we did not sail on any further as our supplies had run out.

COMMENT: The gorillas of Hanno’s tale are not the gorillas that we know today; in fact the connection is the other way round, since when the lowland gorilla (*Gorilla gorilla*) was first recognised in 1847, it was named after Hanno’s ‘hairy men’ (Conniff 2009). The identification of the anthropoids in this story is difficult: Hanno’s voyage of exploration around West Africa is presented in a late text and is hard to locate in time – indeed some have doubted that it is genuine – but the information given in the account seems to support a voyage from Carthage around the coast of Africa as far as Cameroon (Ramin 1976: 71–4), perhaps in the fifth century BCE. Hanno describes the elephants, crocodiles and hippopotami which he and his crew encountered (*Peri.* 4, 10), animals with which he was evidently familiar, but the ‘gorillas’ were new. That they were not lowland gorillas is certain – gorillas have never lived as far west as this, or on coastal islands (Kitchell 2014: 78). It is tempting to say that they were an invention; after all, ‘hairy men’ were a staple of ancient travellers’ tales, but the inclusion of observed behaviour (fleeing into crags and throwing rocks) and the claim that skins of three females were taken back to Carthage make this unlikely (cf. Plin, *NHVI*.36). Perhaps then these creatures were chimpanzees, which would accord with the behaviour described, and would still make this passage the only reference to true apes from antiquity.

Bibliography

- R.D. Barnett, ‘Monkey business’, *Journal of Ancient Near Eastern Studies* 5 (1973), 1–10.
R. Conniff, ‘Discovering Gorilla’, *Evolutionary Anthropology* 18 (2009), 55–61.
F. Dunand and R. Lichtenberg, *Des animaux et des homes. Une symbiose égyptienne* (Paris 2005).
L. Evans, *Animal Behaviour in Egyptian Art. Representations of the Natural Worlds in Memphite Tomb Scenes* (Warminster 2010).
P. Germond, *An Egyptian Bestiary* (London 2001).
J. Goudsmit and D. Brandon-Jones, ‘Mummies of olive baboons and barbary macaques in the baboon catacomb of the sacred animal necropolis at North Saqqara’, *Journal of Egyptian Archaeology* 85 (1999), 45–53.
J. Goudsmit and D. Brandon-Jones, ‘Evidence from the baboon catacomb in north Saqqara for a west Mediterranean monkey trade route to Ptolemaic Alexandria’, *Journal of Egyptian Archaeology* 86 (2000), 111–19.

- C. Greenlaw, *The Representation of Monkeys in the Art and Thought of Mediterranean Cultures. A New Perspective on Ancient Primates* (Oxford 2011).
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- S. Ikram, 'Divine creatures: animal mummies', in S. Ikram (ed.), *Divine Creatures. Animal Mummies in Ancient Egypt* (Cairo 2005a), 1–15.
- S. Ikram, 'Protecting pets and cleaning crocodiles. The Animal Mummy Project', in S. Ikram (ed.), *Divine Creatures. Animal Mummies in Ancient Egypt* (Cairo 2005b), 207–27.
- S. Ikram, *Beloved Beasts. Animal Mummies from Ancient Egypt* (Cairo 2006).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- N.B. Kampen, *Image and Status: Roman working women at Ostia* (Berlin 1981).
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
- A.P. Kozloff (ed.), *Animals in Ancient Art from the Leo Mildenberg Collection* (Bloomington 1981).
- H. Kummer, *In Quest of the Sacred Baboon: a scientist's journey* (Princeton 1995).
- M. Lichtheim, *Ancient Egyptian Literature, Volume 1: the Old and Middle Kingdoms* (Berkeley 1974).
- C. Mendleson, 'More monkey business', *Anatolian Studies* 33 (1983), 81–3.
- D. Morris, *Monkey* (London 2013).
- O. Olesti et al., 'Controlling the Pyrenees. A macaque's burial from late antique Iulia Libica (Llívia, La Cerdanya, Spain)', in A. Sarantis and N. Christie (eds), *War and Warfare in Late Antiquity: current perspectives* (Leiden 2013), 703–31.
- T. O'Connor, *Animals as Neighbours. The Past and Present of Commensal Species* (East Lansing 2013).
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- P.J. Parker, 'African vervets on Crete and Thera during MMIIIB – LMIA', *AJA* 101 (1997), 348 (abstract).
- D.T. Potts, *Mesopotamian Civilization: the material foundations* (Ithaca 1997).
- D. Preziosi and L.A. Hitchcock, *Aegean Art and Archaeology* (Oxford 1999).
- J. Ramin, *Le Periple d'Hannon/The Periplus of Hanno* (BAR Suppl. 3) (Oxford 1976).
- D. Rebuffat-Emmanuel, 'Singes de Mauretanie Tingitane et d'Italie: reflexions sur une analogie iconographique', *Studi Etruschi* 35 (1967), 633–44.
- A. Spycket, '"Le Carnaval des Animaux": on some musician monkeys from the ancient Near East', *Iraq* 60 (1998), 1–10.
- T.F. Strasser, 'The blue monkeys of the Aegean and their implications for Bronze Age trade', *AJA* 101 (1997), 348 (abstract).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- R. van Emden, *Tommy's Ark: soldiers and their animals in the Great War* (London 2010).

Birds

CROW/RAVEN

The *Corvidae* family comprises some 40 species of birds, and crows make up a third of that number; all are black or black with flashes or specks of white. All corvids are essentially scavengers: since the beginning of human history the raven (Greek *korax*; Latin *corvus*) has spread alongside domestic animals, preying on the young and the weak, while the omnivorous crow (Greek *korone*; Latin *cornix*) has always found human settlements an excellent food source. In his assessment of the cultural history of the crow, Cocker (2013: 384–5) notes that:

Crows have long been cast as the villains of the avian world. They are still viewed widely as destructive of our property, crops and livestock, as well as being preposterous in nature itself and vicious predators of their wildlife neighbours . . . In the past they were condemned for possessing a kind of moral darkness. Simply to see or encounter crows could be an ordeal unsettling our peace of mind and presaging misfortune. In short, crows were bad for us physically and psychologically. Few other birds carry quite the same deep negative burden.

In Near Eastern antiquity it is possible that some six members of the crow family were known: the raven, fan-tailed raven, hooded crow, jay, rook and jackdaw, although texts and images are indistinct in rendering the birds accurately. Near Eastern terms for ‘crow’ probably converge in much the way that the modern English ‘crow’ does. In classical Greece and Italy the corvid family was represented by the crow, the raven and the jackdaw – rooks were not found in Greece and were rare in Italy. Of these species crows were the most frequently seen: their prominence among weather omens demonstrates that they were familiar birds of the town. The crow of the ancient Mediterranean was the grey and black hooded crow (*Corvus cornix*); Pliny (*NH* X.124) refers to a remarkable all-black crow seen in Rome in his time which had been imported from Spain, which is clearly the carrion crow (*Corvus corone*). He also describes the red-legged chough (*Pyrrhocorvus graculus*), saying that it is an Alpine bird (X. 133). Crows were well-observed by natural history writers (Ar. *HA* 593b 12–14, 617b 12–15), but there was an odd belief that they were extremely long-lived, with a lifespan five or even nine times that of a human (Hes. fr. 183; Plut. *Mor.* 415c–d; Ar. *Birds* 609).

The raven is a bigger and more powerful bird than the crow. Ravens create untidy nests on rocky ledges or, occasionally, in trees and, being omnivorous, they will eat any kind of flesh, including that of other birds (Foufopoulos and Litinas 2005). As a bird of the countryside, the raven frequented human settlements less often than the crow, but is more present in both literary and artistic sources because of its symbolic importance, especially in the cult of Mithras. Ravens were part of everyday phrase and proverb: ‘a white raven’ was something rare or impossible (Athen. 360e; *GA* XI.417, 436; *Juv. Sat.* VII.202), and ‘go to the ravens’ was the ancient equivalent of ‘go to Hell’, because of ravens’ propensity for scavenging on corpses (e.g. *Ar. Frogs* 185–9; *Thesm.* 1079).

1. Consider the ravens ...

a) Sumerian disputation text: The Contest Between Summer and Winter (1.183)

In sunshine you lay your plans . . . ;
But now in the city teeth are chattering because of you . . .
In the field, which Enten does not work,
Where no furrows have been cut,
Its grain, not being put in its wholesome place, is taken away by the fat crow;
The produce of the vegetable cutter — of these vegetables the market-price is bad;
Bearing only old reeds, the reed-bearers get cuts in their bare feet.

b) Egyptian Wisdom Literature: The Satire on the Trades (1.48)

The farmer wails more than the guinea fowl,
His voice is louder than a raven’s;
His fingers are swollen
And stink to excess.
He is weary. . .
He is well if one’s well among lions.

c) Akkadian dialogue text: The Obliging Slave (1.155)

The roving man has a full stomach.
Even a prowling dog has a bone to crunch,
and the roving raven finds a place to nest.
The roaming wild ass finds its fill in the steppe. . .
The roving man may become insane,
the prowling dog may break its teeth,
as for the dwelling of the raven,
it is but in the [crack] of a wall,
while the roaming wild ass has
its resting place in the wastes.

d) Hebrew bible, Job 38.41

Who provides food for the raven
when its young cry out to God
and wander about for lack of food?

e) Hebrew bible, Psalm 147.9

He provides food for the cattle
and for the young ravens when they call.

f) New Testament, Luke 12.23–5

For life is more than food, and the body more than clothes. Consider the ravens: they do not sow or reap, they have no storeroom or barn; yet God feeds them. And how much more valuable you are than birds! Who of you by worrying can add a single hour to your life?

g) Hebrew bible, 1 Kings 17.2–6

Then the word of the Lord came to Elijah: 'Leave here, turn eastward and hide in the Kerith Ravine, east of the Jordan. You will drink from the brook, and I have directed the ravens to supply you with food there.'

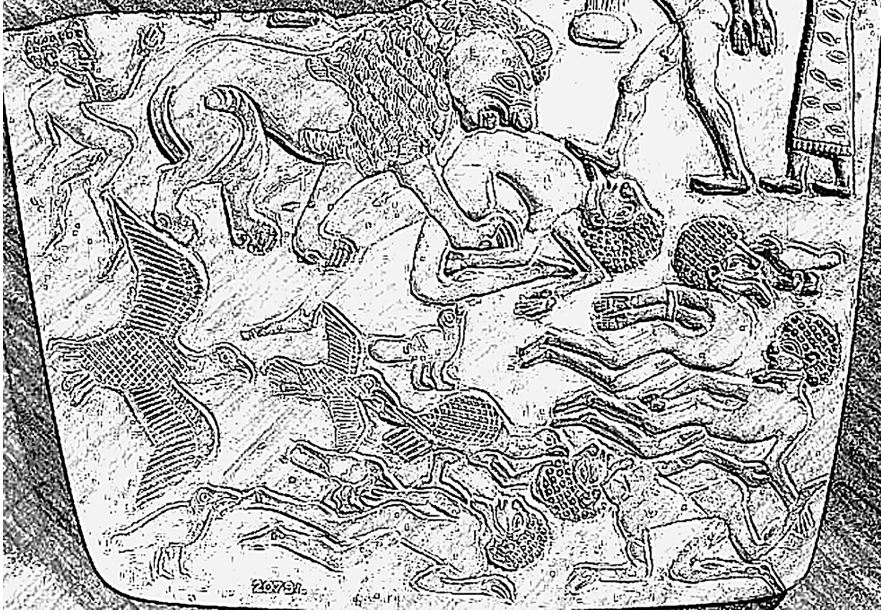
So he did what the Lord had told him. He went to the Kerith Ravine, east of the Jordan, and stayed there. The ravens brought him bread and meat in the morning and bread and meat in the evening, and he drank from the brook.

COMMENT: As is often the case in Near Eastern texts, much can be learned about a single species from inconsequential lines. Crows and ravens enter into the Near Eastern world-view with some regularity and tend to evoke much the same qualities in spite of differences in geography and time. For the most part, crows and ravens were undesirable birds, and while not actually evoking the demonic attributes which would be attributed to them in later times, these birds nonetheless tended to arouse hostile emotions. Their loud cries were unpleasant – partly because of their young's unceasing ability to caw for food – and their nesting habits (crows and ravens will make homes in virtually any habitat) inconvenient. Crows and ravens were ugly opportunists, having no scruples about stealing food from others; in fact, their insatiable appetite was a hallmark of the ancient depiction of the birds. Egyptian New Kingdom wall-paintings show them stealing fruit such as grapes and the fruit of the doum palm from offering tables (Bailleul-LeSuer 2012: 78). Like owls, ravens and crows were also used as vivid literary symbols of desolation (Isaiah 34. 10–12).

In spite of this negativity, some ancient texts do use the birds in a more positive light. When the Gospel writer Luke has Jesus of Nazareth employ the image of the raven (f, above) he does so by conscientiously evoking the rich adverse folklore attached to it in order to show that God's love is so powerful and all-encompassing that even the welfare of these unloved and troublesome birds is in the forefront of his mind. Luke (or Jesus) may have found inspiration in ancient Jewish scriptures (e, above) and stories like that of the prophet Elijah being fed and cared for by ravens. This in itself is a mythological motif found elsewhere in antiquity (see DOVE no. 3).

2. Scavenger ravens

Grey mudstone palette ('Battlefield Palette') from Abydos, Egypt, c. 3100 BCE (London, British Museum EA20791)



COMMENT: The lower half of this fragmentary palette depicts a scene showing the capture of prisoners and the chaos of battle; corpses are strewn over the battlefield and are being preyed upon by vultures, ravens and a lion. The ferocious lion at the centre of the scene probably represents the pharaoh killing his enemies, as it is unlikely that a lion would show the scavenger mentality associated with vultures and ravens.

Crows and ravens were uncommon in ancient Egyptian art, but here the artist skilfully depicts both a vulture and a raven with outstretched wings as they glide down from the sky to the scene of the carnage below. Other ravens are already busy gathering food by stripping the corpses of flesh. They peck and tear at the soft soles of the feet and the palms of the hands of the dead or dying soldiers; one raven (far right) pecks at the eye of a bound, dead, prisoner. It evokes a common image in ancient Near Eastern literature; see, for instance, Proverbs 30.17:

The eye that mocks a father,
that scorns an aged mother,
will be pecked out by the ravens of the valley,
will be eaten by the vultures.

Analysis of human bones found at ancient battlefield sites has revealed the beak-marks left by ravens stripping the flesh off the dead (Houlihan 1986: 186–92). Foufopoulos and Litinas note the repugnance with which writers viewed crows' and ravens' habit of eating the eyes and tongues of dead or dying creatures, which was seen as evidence of the birds' malevolent character, but explain that it is in fact a function of their biology:

Corvids, with their relatively weak beak, are not able to break through the tough hide of especially larger carcasses. In the absence of any larger carrion feeders, such as jackals, dogs, hyenas or vultures, both crows and ravens can only access soft internal tissues through the eyes, mouth or anus. If a larger predator has opened the carcass they will happily consume other soft tissues as well.

(Foufopoulos and Litinas 2005: 17)

3. Noah's raven

a) *Hebrew bible, Genesis 8.6–8*

After forty days Noah opened a window he had made in the ark and sent out a raven, and it kept flying back and forth until the water had dried up from the earth. Then he sent out a dove to see if the water had receded from the surface of the ground.

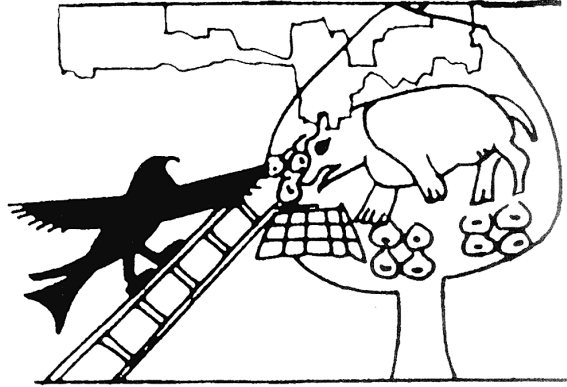
b) *Epic of Gilgamesh*

When the seventh day arrived,
I released a dove to go free,
The dove went and returned,
No landing place came to view, it turned back.
I released a swallow to go free,
The swallow went and returned,
No landing place came to view, it turned back.
I sent a raven to go free,
The raven went forth, saw the ebbing of the waters,
It ate, circled, left droppings, did not turn back.

COMMENT: The Genesis story of Noah's raven and dove (see DOVE no. 1), the two birds sent out to test whether the flood waters had receded, is one of the best-known stories from antiquity, and it finds clear parallels in the *Epic of Gilgamesh's* story of Utnapishtim, the flood-hero who gained eternal life (which Gilgamesh seeks). There are obviously discrepancies between the two stories: Noah's raven is sent out first and returns to the ark, we are led to suppose, until it eventually finds a place to roost, but Utnapishtim sends a raven only after a dove and a swallow have proved inconclusive about the state of the world post-flood. The raven, it appears, is bold in its approach: flying out with confidence, and true to its ancient character, it first eats and then passes excrement, before it finally flies back to Utnapishtim to report on the earth's condition. Crows will feed on almost any flesh – dead, dying, or weak and suffering (see 2, above); this might explain why Noah's raven eventually had no need to return to the ark: it had discovered something drowned and exposed to feed on. This helps explain the Hebrew prohibition on eating crows of any kind (Leviticus 11.15; Deuteronomy 14.14), yet it is this scavenging nature that made the raven the bird most helpful to Noah and to Utnapishtim (Marcus 2002).

4. A topsy-turvy world

Line drawing of a vignette from the Turin satirical erotic papyrus, XIX or XX Dynasty, c. 1250 BCE–1150 BCE (after Houlihan 2001: 72)



COMMENT: The ancient Egyptians had a highly developed sense of absurdity and in their satirical works of art and literature they often employed animal figures in the place of human beings (see HUMAN no. 10). The well-known Turin Erotic Papyrus (Papyrus 55001) contains a series of remarkable vignettes showing this topsy-turvy world of animals or animals performing human tasks. In this ‘zany world of animal burlesques’ (Houlihan 2001: 72) this scene stands out as a masterpiece of weirdness: a crow, ever hungry, laboriously trudges up a ladder which leans against a sycamore fig tree in order to collect the fruit. But, once up, he finds that a fully grown hippopotamus, wicker basket at the ready, has already beaten him to it! Crows are often depicted in Ramesside ostraca – inevitably eating the fruit of the doum palm in which they perch (Houlihan 1986: 132–3, figs 187 and 188).

5. Speaking ravens and crows

Macrobius Saturnalia II.4.29–30

[Augustus] returned to great acclaim after his victory at Actium. Among those who gathered to congratulate him was a man with a raven which he had taught to say, ‘Hail Caesar, victorious general!’ Impressed, Augustus bought the courteous bird for twenty thousand sesterces. But a companion of the bird’s owner, who had shared none of the generous reward, told Augustus that the owner had another raven, and advised him to make him bring this one to him as well. When it was brought, the second raven spoke the words it had been taught: ‘Hail Antony, victorious general!’ Augustus took this in good part, and simply bade the owner divide the price he had received with his companion. Augustus also received a similar greeting from a parrot, and, more surprisingly, from a magpie, and he bought both of these too.

A poor cobbler was induced by these examples to teach a raven to deliver a similar greeting: he spent all of his money on a bird, and would often say to it, when it refused to speak, ‘What a waste of money and effort!’ At length, however, his raven began to

speaking the greeting it was taught. But when Augustus heard it as he passed by, he said, 'I have enough of these kinds of greeting at home.' The raven, remembering the complaint it had so often heard from its master, responded, 'What a waste of money and effort!', whereupon Augustus laughed and bought the bird for a higher price than the previous ones.

COMMENT: Macrobius' story sits in a fine tradition of canny peasants attempting to please a ruler with a well-trained or appropriately named animal – see DONKEY no.16. Crows and ravens were among the most common pet birds in antiquity: they are strongly imitative, and their principal attraction was their ability to speak. Pliny (*NH* X.121–3) relates the story of a raven owned by another cobbler that went to the Forum every day and greeted the emperor and passers-by, which received a public funeral when it died. There was evidently a belief that birds might speak of their own accord, without being taught: Suetonius says that a crow perched on the Capitol foretold the death of Domitian (*Dom.* 23.2). Speech in a bird was interpreted as a sign of intelligence, and the raven is credited in ancient sources with other reasoning abilities, such as Pliny's story of the raven dropping pebbles into a jar of water to raise the level of liquid and allow it to drink (*NH* X.125); tool-using and problem-solving intelligence in ravens is now well documented (Emery and Clayton 2004).

6. The jackdaw as pest

Aelian, On the Nature of Animals 17.6

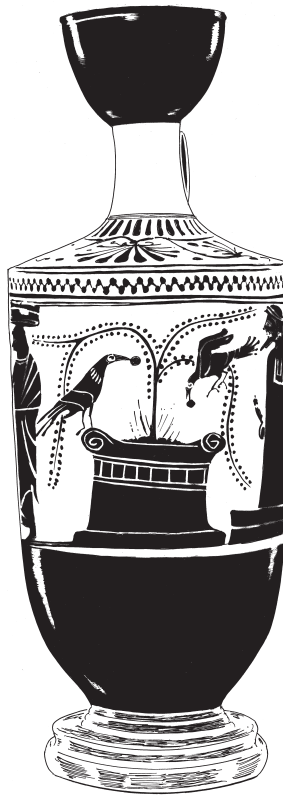
According to Theopompus the Veneti who live around the Adriatic coast give gifts to the jackdaws at the time of the third ploughing and sowing of the seed. These gifts take the form of cakes of ground barley mixed with honey and oil, well-kneaded. The reason they give these to the jackdaws is as a bribe and a kind of agreement, to prevent them from digging up and collecting the fruit of Demeter which has been planted. Lycus gives the same account, and adds that . . . [. . .] . . . and scarlet thongs, then when they have set out the gifts, they retreat. The flocks of jackdaws stay outside the boundary they have drawn, but they send two or three birds chosen as ambassadors to see how many gifts there are. Once these birds have examined the presented they go back and summon the others, using their accustomed calls. The rest of the jackdaws settle to ground in clouds and if they eat the gifts that are offered, the Veneti know that an agreement has been reached with the birds, but if they scorn the offerings as worthless and refuse to eat them, the inhabitants are convinced that a famine is in store for them, because if the jackdaws are unfed and unbribed, so to speak, they flock to the ploughed fields and rob them of most of what has been sown, digging up and searching out the seeds with great industry, and distressing the Veneti extremely.

COMMENT: Great flocks of jackdaws and starlings (more correctly clatterings of jackdaws and murmurations of starlings) are mentioned by Homer (*Il.* XVII.755), and Pliny says that they were particularly common in northern Italy (*NH* X.77). As seed eaters, jackdaws could certainly pose problems for farmers, and one of Aesop's fables depicts a farmer driving them from his fields with stones from a sling (Perry 298). Elsewhere, however, Aelian says that jackdaws were valued in certain regions because they preyed on locusts (*Ael.* III.12; see LOCUST no. 8). As with crows and ravens, jackdaws were also kept as pets: Aristophanes' *Birds* 18–19 represents a character buying a jackdaw from a stall, and in *Wasps* 129–30 a reference is made to a pet jackdaw climbing

a ladder, something which was obviously a familiar sight: in Theophrastus' *Characters* the man of petty pride has a tiny bronze shield made for his jackdaw to carry as it scales its ladder (21.6). Aelian was so impressed with Philo's tale of a jackdaw which fell in love with a beautiful Spartan boy that he told it twice (I.6, XII.37). At Rome, however, the jackdaw also had a reputation as a thief: Pliny (X.77) says that jackdaws are remarkably fond of stealing gold and silver objects, and Cicero, in his speech *For Flaccus*, suggests that one of his opponents was considered 'no more to be trusted with gold than a jackdaw' (76).

7. Scavenging ravens

Lekythos, Palermo Museo Archeologico Regionale T4 (drawing by Tessa Rickards)



COMMENT: This black-figure lekythos, made in Athens around 500 BCE and found in Selinous in Sicily, depicts two ravens picking pieces of meat from an altar. The sacrificial fire is still burning as the right-hand bird swoops in; the left-hand raven perches on the altar, behind which stands a tree. On the right is a herm, representing the god being worshipped, and to the left a woman carries a basket for the offerings. The identification of birds on Greek pottery is notoriously difficult, and in many cases it can be hard to distinguish raptors such as the kite or vulture from corvids, but here the ravens' distinctive beaks and feet are shown, and their scavenging action is

characteristic. Hatzivassiliou, in a study of black-figure iconography (2009), identifies ravens on several pots perched on ash or stone altars. Some have linked this to the religious associations of the raven as companion of Apollo and Artemis (e.g. *LIMC* Apollo 45), but the depictions are far more likely to reflect real behaviour: open-air sacrifice notoriously attracted carrion-eating birds (Aesch. *Suppl.* 750–2), and ravens are also shown in more rural settings, perched on the back of a cow (Schmidt 2002: fig. 23 and pp. 88–90) or a mule (ibid. figs 14–16 and pp. 65–8).

8. Raven omens

Plutarch Alexander 27

Indeed on this journey [to the temple of Ammon at Siwah] the divine assistance which Alexander received in his difficulties was believed more readily than the subsequent oracles; in fact the oracles gained credibility because of the previous interventions of the god. First of all there was much rain and heavy showers sent by Zeus, which freed the army from the fear of thirst and cooled the dryness of the sand, making it damp and compacted, and the air clearer and easy to breathe. Then, when the way-markers by which they were guided became confused, and the army was wandering and scattered because they had lost their way, some ravens appeared to lead them in the right direction, flying swiftly before them as they followed, and waiting for them when they slowed and fell behind. Most remarkable of all, according to Callisthenes, if any soldier wandered away at night, the ravens would croak to call him back, and bring him back to the proper route.

Livy History of Rome VII.26.1–5

While the Romans were keeping a quiet watch on guard-duty, a Gaul of impressive stature and arms came forward; he rattled his spear against his shield to call for silence, then through an interpreter challenged one of the Romans to engage in single combat. Marcus Valerius, a young military tribune, who though himself no less worthy of such an honour than T. Manlius, after seeking the consul's permission, armed himself and went out before the camps to fight. The contest was remarkable not simply as a human spectacle, but for the intervention of a divine power: for as they joined battle a raven suddenly settled on the crest of Valerius' helmet facing his enemy. At first the tribune gladly accepted this as a heaven-sent omen, and made a prayer: 'whether god or goddess sends this sign, show me favour and aid me now!' And, marvellous to report, the raven not only remained on the perch it had chosen, but whenever the men came to blows it would take to the air and attack the face and eyes of Valerius' opponent with beak and talons, until the Gaul, terrified by such a prodigy and thrown into confusion by the attacks, fell to Valerius. Then the raven soared up out of sight, towards the east.

COMMENT: It is no coincidence that both these tales of divinely sent ravens are military in setting – Alexander's journey through the desert to the oracle of Zeus Ammon at Siwah in 331 and Camillus' war with the Gauls in 349 – since ravens have always tended to follow armies for the opportunity to feed on the dead. Both, however, testify to the significance of the raven as a bird of omen. At an everyday level, crows were seen as ominous birds which could be propitious or unpropitious: Hesiod (*WD* 746–7) advises against leaving the roof of a house unplanned, lest it attract a croaking crow to bring ill fortune to the inhabitants, and at a wedding a single crow was

seen as inauspicious, whereas a pair brought a good omen (Aelian III.9). On a more public scale, however, the more impressive raven was usually the bird of omen, and sacred ravens may in fact have been found at some sanctuaries: Clement of Alexandria refers to speaking ravens trained to deliver oracles (*Protrept.* II.11).

The story of M. Valerius (later surnamed Corvus (Livy XXVI.12)) also has something more to it than simply divine aid offered in the form of a bird: according to Diodorus the Gauls wore fanciful helmets made in the appearance of birds and beasts (V.30: see SWAN no. 6), and Valerius' raven thus became a living helmet-device for him, more fearsome than the Gauls' model animals because it could actually attack. Schmidt illustrates a Celtic iron helmet topped with a large bronze bird which was found in a burial at Ciurmești in Romania as perhaps representing a raven, but it is more likely from its beak to be an eagle (Bucharest Muz. Nat. 69.676; Schmidt 2002: 108 and fig. 29).

9. Ravens in Roman Britain

*Raven bones from pit 2218, Danebury (photograph by
kind permission of Prof Dale Serjeantson)*



COMMENT: The status of the raven in Roman Britain is interesting: remains of ravens are very often found at Roman sites of all kinds, urban, military and industrial, indicating that it was one of the birds most present in Romano-British settlements (Parker 1988: 218). The wing and leg bones shown above were discovered at the Iron Age hillfort site of Danebury, and are some of the very large number of remains of ravens and crows found deposited in pits at the site: corvid bones comprise 80 per cent of all bird bones found there (Serjeantson 2010). Raven and crow burial is a practice common to Iron Age and Roman sites across Britain and northern Europe: the bones are almost always found in deliberate depositions, most often as whole skeletons, and Serjeantson and Morris (2011) have collected data relating to thirty-five sites where corvids (ravens or crows) were found in burials, tracing the changing interpretations offered by archaeologists. Corvids were not eaten, so initially the skeletons were thought to be of birds killed as scavengers, for their feathers, or of pet birds kept for their speech. As the evidence has mounted, however, most have come to the conclusion that the raven burials were religious in nature, indicating some continuity of religious practice with Iron Age beliefs. Ravens were seen as mantic birds, connected with the gods of war and the underworld through their scavenging habits, and tamed ravens were perhaps kept by priests as animal familiars (Serjeantson and Morris 2011: 100–1). The burials would thus reflect the role of the raven as intermediary between humans and gods, in continuity with Celtic tradition.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 R. Bailleul-LeSuer (ed.), *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
 M. Cocker, *Birds and People* (London 2013).
 N.J. Emery and N.S. Clayton, 'The mentality of crows: convergent evolution of intelligence in corvids and apes', *Science* 1306 (2004), 1903–7.
 J. Foufopoulos and N. Litinas, 'Crows and ravens in the Mediterranean (the Nile Valley, Greece and Italy) as presented in the ancient and modern proverbial literature', *The Bulletin of the American Society of Papyrologists* 42.1–4 (2005), 7–40.
 E. Hatzivassiliou, 'Warriors at a mound: a puzzle scene by the Theseus and Athena Painters', in V. Norskov et al. (eds), *The World of Greek Vases* (Rome 2009), 115–32.
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 P.F. Houlihan, *Wit and Humour in Ancient Egypt* (London 2001).
 D. Marcus, 'The mission of the raven (Gen. 8:7)', *Journal of the Ancient Near Eastern Society* 29 (2002), 71–80.
 A.J. Parker, 'The birds of Roman Britain', *Oxford Journal of Archaeology* 7 (1988), 197–222.
 D. Serjeantson, 'Ravens and crows in Iron Age Britain: the Danebury corvids', in W. Prummel, J. Zeiler and D. Brinkhuisen (eds), *Proceedings of the 6th Bird Working Group Meeting, Groningen 2008* (Groningen 2010), 175–85.
 D. Serjeantson and J. Morris, 'Ravens and crows in Iron Age and Roman Britain', *Oxford Journal of Archaeology* 30 (2011), 85–107.
 G. Schmidt, *Raben und Krähe in der Antike: Studien zur archäologischen und literarischen überlieferung* (Wiesbaden 2002).
 G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.

SPARROW

The house sparrow (*Passer domesticus*) is one of the most widespread species of bird in the world today, introduced to every continent except Antarctica. Sparrows have lived alongside humans since prehistoric times and thrive in urban environments, living on flies and other small insects

as well as grain and food refuse. They are very social birds and breed in colonies, but even out of the breeding season they tend to flock in large numbers: up to 10,000 house sparrows have been counted in one roost in modern Egypt (Todd 2012; Summers-Smith 2009). The term ‘sparrow’ in fact covers a large number of species of small seed-eating birds, including rock sparrows and snow finches, but in the ancient world they were not differentiated: in fact the terms for the sparrow in Greek, *strouthos*, and in Latin, *passer*, could be used generically to mean any small bird.

The sparrow’s habits are, as one would expect, well described by classical scientific writers, who note that they take dust-baths, mate rapidly and are quarrelsome (Ar. *HA* 539b33, 633b4–5; *GA* 774b26–9; Athen. 391e–f; Pliny *NH* X.111), but they struggled with certain aspects of sparrows’ life cycle: the males develop a black bib in springtime as mating plumage, but for the rest of the year are closer in appearance to the females, and Aristotle assumed that the black-bibbed males vanished after the summer and must therefore be extremely short-lived (*HA* 613a 29–b2, followed by Pliny *NH* X.107).

In the ancient Near East sparrows were, surprisingly, regarded unfavourably: they acquired the reputation as harbingers of evil or disaster (Cocker 2013: 485–8). For this reason, and because they were so common and unremarkable in appearance, sparrows are little represented in ancient art. It is unusual for Egyptian art to depict the house sparrow naturalistically, but the XIX Dynasty Theban tomb of Userhet has one such example: a wall-painting shows the delicate birds (beautifully rendered by the artist) feeding in a sycamore fig tree (Houlihan 1986: 136, fig. 194). They are equally rare in Roman art, though Watson identifies one or two in garden wall-paintings from Pompeii (Tammisto 1997: 125; Watson 2001: 388).

1. Sparrow observations

a) Sumerian cuneiform text, third millennium BCE (after Black et al. 2004)

Like fire beaten down (?) in houses and in fields, like sparrows chased from the door of a house, you are turned into the lame and the weak of the land.

b) Hebrew bible, Psalm 84.3–4

Even the sparrow has found a home,
and the swallow a nest for herself,
where she may have her young—
a place near your altar,
Lord Almighty, my King and my God.
Blessed are those who dwell in your house;
they are ever praising you.

c) Hebrew bible, Psalm 108.7–8

I lie awake; I have become
like a sparrow alone on a roof.
All day long my enemies taunt me;
those who rail against me use my name as a curse.

d) Hebrew bible, Proverbs 26.1–2

Like snow in summer or rain in harvest,
honour is not fitting for a fool.
Like a fluttering sparrow or a darting swallow,
an undeserved curse does not come to rest.

e) Hebrew bible, Hosea 11.10–12

They will follow the Lord;
he will roar like a lion.
When he roars,
his children will come trembling from the west.
They will come from Egypt,
trembling like sparrows,
from Assyria, fluttering like doves.
‘I will settle them in their homes,’
declares the Lord.

COMMENT: Many ancient Near Eastern texts refer to the habits of the sparrow and especially its habit of nesting within houses, temples and other human spaces. Sparrows were regarded as pests and nuisance-birds, especially to the farmer because they gathered in large flocks, ate grain and caused damage to the fields. A Ramesside didactic text from Egypt notes that a farmer’s lot is made difficult by sparrows that ‘bring want upon the cultivator’ (Houlihan 1986: 137).

What is particularly and significantly different between ancient Near Eastern and modern Western conceptions of the sparrow, however, is that the bird did not inspire images of chirping or domesticity, but instead represented terror and mourning: the Sumerian goddess Ningal flees her destroyed city Ur, ‘like a sparrow’; Ib-bi-Sin was led away captive by the Elamites ‘like a sparrow that has fled its house’ and the high-priestess Enheduanna laments her fate by crying, ‘I was forced to flee the cote like a sparrow.’ In a Sumerian narrative poem, Lugalbanda’s brothers and comrades huddle together like terrified sparrows afraid of massing storm clouds (Kramer 1969: 7).

In Egypt, too, the sparrow was a bird of ill-omen. Its ubiquitous unwanted presence within domestic space led to it being regarded as something that had to be driven away. The sparrow was incorporated into the Egyptian writing system, and while the hieroglyph read by itself (*nḏs*) simply meant ‘small’, when it was used as a determinative it evoked concepts of ‘inferiority’, ‘badness’ and ‘evil’. The hieroglyph itself was often painted red as a mark of this undesirability (Bailleul-LeSuer 2012: 172). A New Kingdom snake-charm, invoking the myth of Isis and Horus, incorporates the sparrow hieroglyph thus: ‘You shall spit out, Black Face, you shall be blinded, Bright Eye, who advances twisting, oh badness (*nḏs*), which emerged from the thighs of Isis and bit (her) son Horus.’

2. The value of a sparrow

a) New Testament, Matthew 10.29–31

Are not two sparrows sold for a penny (*assarion*)? Yet not one of them will fall to the ground outside your Father’s care. And even the very hairs of your head are all numbered. So don’t be afraid; you are worth more than many sparrows.

b) New Testament, Luke 12.5–7

But I will show you whom you should fear: Fear him who, after your body has been killed, has authority to throw you into hell. Yes, I tell you, fear him. Are not five sparrows sold for two pennies? Yet not one of them is forgotten by God. Indeed, the very hairs of your head are all numbered. Don't be afraid; you are worth more than many sparrows.

COMMENT: According to the New Testament, sparrows were sold in market places in Judaea as cheap food for the poor. A sparrow was, according to Matthew, worth a bronze *assarion*, the diminutive of the *as*, and therefore equal to a tenth part of a *denarius* (the average day's wages for a labourer). For Luke, the cheapness of the bird is even more apparent; sparrows could be caught in great numbers, but because they are so small and not much valued as nutritious food, five sparrows might be sold for a meagre sum (Manson 1957: 106–8). The same was true across the Roman empire: sparrows were eaten with sufficient regularity in the Roman empire to be listed in the *Edict of Maximum Prices* (4.37), but at 16 *denarii* for ten they were significantly cheaper than thrushes (60 *denarii* for ten), goldfinches (40 *denarii*) or starlings (20 *denarii*). Luke's use of the sparrow, a bird of countless numbers that was eagerly and easily destroyed as a worthless nuisance, is carefully employed so as to emphasise the enormous worth of an individual man in the eyes of God.

3. The sparrow in town and village

Theophrastus, Weather Signs 28 and 39

- [28] In the winter when sparrows are noisy at evening it signals either a change in the wind or a rainstorm.
- [39] If a white sparrow is seen, or a white swallow, or any other bird which is not normally white, it is a sign of a great storm.

Herodotus Histories I.159

Aristodikos came to Branchidae and consulted the oracle on behalf of the embassy, asking, 'Lord Apollo, Pactyes the Lydian came to our city as a suppliant, fleeing execution at the hands of the Persians: they have ordered us Cumaeans to hand him over to them. But even though we fear Persian power, we did not dare to hand over a suppliant without receiving a clear answer from you as to whether we should do so.' Aristodikos asked in these terms, and the oracle returned the same answer as before, bidding the Cumaeans hand Pactyes over to the Persians.

Hearing this, Aristodikos was unsurprised, and did the following: he went around the outside of the temple and took from their nests the sparrows and other birds which had nested in the temple. As he was doing this, it is said that a voice emanated from the sanctuary, saying, 'You most impious fellow, how dare you kill the suppliants in my own temple!' Aristodikos, retaining his composure, replied, 'Lord Apollo, do you protect your own suppliants so fiercely, and yet order the Cumaeans to hand over theirs?' And the voice answered him, 'Yes, I do order it, so that you may be the sooner destroyed, sacrilegious as you are, and never again come to consult my oracle about handing over suppliants.'

Aristophanes Birds 577–80

CHORUS: And what if humans in their ignorance refuse to believe in us birds as divinities and insist on worshipping the Olympian gods?

PEISTHETAIROS: A cloud of sparrows and rooks will descend and strip the fields of grain; then let Demeter measure out the wheat for them as they starve.

COMMENT: Sparrows are familiar town birds in modern times, and plenty of ancient writers attest to the ubiquity of sparrows in the classical town and village too, nesting in buildings and exploiting farmland, stores and streets for grain. All three species of sparrow found in the Mediterranean were treated as one by classical writers, though Athenaeus (391f) preserves a reference by Alexander of Myndos to ‘wild and domestic’ sparrows, which perhaps shows a distinction made between the house sparrow and tree sparrow (*Passer montanus*) (Arnott 2007: 225–6). The three passages here indicate close familiarity with sparrows: their behaviour forms part of Greek weather-lore (though Brunschön and Sider (2006: *ad loc.*) say that sparrows were not often taken as weather signs, perhaps because they were so common), Herodotus shows them nesting in temple buildings, and Aristophanes comments on the damage they could do to agriculture. Herodotus’ story of the sparrows nesting in the eaves of Apollo’s temple is surprisingly positive, suggesting that they found a welcome there, although in Euripides’ *Ion* the eponymous character is a temple attendant at Delphi whose role is to chase the birds away (170–5). Stories of sparrows as agricultural pests are somewhat more common: among Aelian’s examples of invasive animals causing disaster to humans, he records the case of a horde of sparrows which drove out the inhabitants of Media by eating their seeds and destroying the harvest (NA XVII.41).

4. Catullus’ pet sparrow

Catullus 2 and 3 (trans. R. Mackenzie)

You lucky sparrow – my girlfriend’s pet!
She’ll play with you and hold you in her lap
and even offer you her fingertips to peck at,
teasing you till you nip her hard,
whenever my little bobby-dazzler
wants to fool around and find
some consolation when she’s sad
and the heat of passion’s cooling.
If only I could play with you as she does
and shake off the gloom
weighing on my unhappy heart.

III

Cry your eyes out, Venuses, Cupids
and anyone with an ounce of feeling!
My girl’s pet sparrow is dead,
the bird she loved with all her heart.
He was so sweet – he’d recognize
his mistress, like a little girl
hurrying to greet her mother.

He never wandered from her lap
 but hopped about all over her,
 twittering to his only mistress.
 But now he starts his journey to the shades,
 to a place of no return.
 You'll rue the day, black underworld shadows,
 devouring every pretty thing!
 You've stolen away my lovely sparrow.
 Murder most foul! Poor little bird!
 Because of you my girlfriend's eyes
 are all red and puffy with crying!

COMMENT: The *passer* of Catullus' poems (given here in a modern translation by Robin MacKenzie) is the most discussed bird in antiquity: Catullus' second *carmen* describes his girlfriend's entertaining pet sparrow, while the third is an extended lament on its death. Early scholars were convinced that the *passer* of the poem could not have been a house sparrow, which was believed to be resistant to domestication, and attempted to identify another species of bird in the poem; the most frequent suggestion was the blue rock thrush, *Monticola solitarius* (e.g. Fordyce 1961: 87–9, drawing on Thompson 1936), while Jennison proposed that it was a bullfinch (*Pyrrhula pyrrhula*) (1937/2005: 117). Arnott, however, argues from the behaviour described in the two poems – the bird recognised its mistress, cheeped rather than sang, hopped about and would peck at her finger – that this does most closely resemble the house sparrow, adducing more modern examples of sparrows which were successfully tamed when young (2007: 227–8).

More recently, scholarly attention has focused on a perceived double meaning of the Latin word *passer*, suggesting that the motivation for the poems is erotic, referring to the lover's phallus and its 'death' or impotence, thus making the choice of bird subordinate to a *double entendre* (Jones 1998, with references to earlier scholarship). As the Roman enthusiasm for pet birds shows, however (see NIGHTINGALE, CROW, PARROT, PETS), the *passer* must be considered as a real bird even if it does carry a second metaphorical meaning, and the poems show that such pet birds were valued for their playfulness as well as their song. Catullus' lament for the sparrow provided a popular model for later poets (e.g. Ovid *Amores* 2.6, Statius *Silvae* 2.4 = PETS no. 18).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 R. Bailleul-LeSuer (ed.), *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
 J. Black, G. Cunningham, E. Robson and G. Zólyomi, *The Literature of Ancient Sumer* (Oxford 2004).
 C.W. Brunschön and D. Sider (eds), *Theophrastus On Weather Signs* (Leiden 2006).
 M. Cocker, *Birds and People* (London 2013).
 C.J. Fordyce, *Catullus: a commentary* (Oxford 1961).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
 J.W. Jones Jr., 'Catullus' *passer* as *passer*', *Greece and Rome* 45 (1998), 188–94.
 S.N. Kramer, 'Sumerian similes: a panoramic view of some of man's oldest literary images', *Journal of the American Oriental Society* 89.1 (1969), 1–10.
 T.W. Manson, *The Sayings of Jesus* (Canterbury 1957).
 J.D. Summers-Smith, (2009) 'Family *Passeridae* (Old World sparrows)', in J. del Hoyo, A. Elliott and D. Christie (eds), *Handbook of the Birds of the World. Volume 14: bush-shrikes to old world sparrows* (Barcelona 2009), 70–101.
 A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).

D.W.Thompson, *A Glossary of Greek Birds* (Oxford 1936).

K.Todd. *Sparrow* (London 2012).

G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F.Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.

NIGHTINGALE

Both the common nightingale (*Luscinia megarhynchos*) and the thrush nightingale (*Luscinia luscinia*) were, and still are, summer visitors to Greece and Italy, and their rich musical song was heard in woodlands across the northern Mediterranean. Natural history writers have relatively little to say about the bird itself beyond simple information about nesting habits and changes of song (Ar. *HA* 542b 26–7, 632b 20–7): like many migrant birds it was believed to hide in the winter. But its melodious song gave it a great importance in both myth and symbolism – the myth of Aedon appears early in both literature and art (Hom. *Od.* XIX.518–23; see Gantz 1993: 239–41) – and it also came to symbolise poetic and musical ability (e.g. Pausan. IX.30.6, and below no. 2). Yet representations of the nightingale as a living bird are very few; as Tammisto (1997) notes, this is undoubtedly because it was difficult to see, preferring to sing from cover, and unremarkable in appearance. They were commonly trapped, either with bird-lime or with nets (Oppian *Cyn.* I.76; Dionys. *On Birds* III.13), to be sold as pets. Only one or two are clearly identifiable in Roman mosaics or wall-paintings, including a caged nightingale in the garden painting of Livia's villa at Prima Porta (Tammisto 1997: n. 733). The few cases in which they were said to have been eaten, however, seem to be deliberate conspicuous consumption (Hor. *Sat.* II. 3.243–5; SHA *Elag.* 20.5) – eating a nightingale was considered to be something quite perverse.

1. The nightingales at Colonus

Sophocles Oedipus at Colonus 668–80

Stranger, in this land of fine horses you have come to earth's fairest home, the shining Colonus. Here the nightingale, a constant guest, trills her clear note under the trees of green glades, dwelling amid the wine-dark ivy and the god's inviolate foliage, rich in berries and fruit, unvisited by sun, unvexed by the wind of any storm. Here the reveller Dionysus ever walks the ground, companion of the nymphs that nursed him.

COMMENT: Sophocles' ode in praise of Colonus is generally considered to be the finest in Greek drama, and no translation can hope to do it full justice; the version given here is that of R.C. Jebb, the great Victorian scholar of Sophocles. The ode describes the characteristic plants and animals of Attica, the narcissus and crocus, the olive and the horse, and includes the lyrical description of the grove where nightingales sing. Because of the strong link between the nightingale and the myth of Philomela grieving for her lost son (Ov. *Met.* VI.424–674), the bird is often interpreted as symbolic rather than realistic in this and similar passages (McDevitt 1972), but the many appreciative ancient references to the song of the nightingale suggest that here it is meant to evoke for a local audience the typical sound of their region.

2. An appreciation of the nightingale

Pliny Natural History X.81–5

One of the most remarkable birds is the nightingale, which pours forth its trilling song continuously for fifteen days and nights at the time that the trees come into leaf. First of all, it is astonishing that such a small bird should produce so impressive a song and have such energy; and then it has such perfect mastery of music, for it varies its singing, at one time drawing out a note on one breath, then varying it by changes of the throat – it sings staccato notes, joins them in melody or holds a single tone; its song suddenly becomes soft, as it murmurs to itself, then swells, and it sings low and high, notes tumbling over each other or a single drawn-out note, sometimes with vibrato, treble, alto and contralto; in short, the throat of this tiny bird can produce all the sounds for which human skill created the complex mechanism of the flute. There can be no doubt that it was a clear foretelling of such sweetness when a nightingale sang perched on the lips of the infant Stesichorus. But the nightingale's skill is shown beyond doubt by the fact that each bird has its own distinctive songs, and no two are alike. They compete among themselves, and clearly with a fierce rivalry; it often happens that the losing bird dies, its breath failing before its musical invention. The juvenile birds practice their songs and are taught to imitate the music of others: the pupil listens with close attention and repeats what it hears, the birds taking it in turn to sing. One can hear the learner's song improving as it is taught, and the tutor offering criticism, so to speak.

Nightingales, for this reason, are as expensive as slaves, and indeed sometimes more expensive than the price paid for shield-bearers in times past. I know for a fact that a white nightingale, something surpassingly rare, was bought for six hundred thousand sesterces as a present for Agrippina, the wife of the emperor Claudius. One may also often see nightingales which have been trained to sing on command, or to reply to a water-organ (for there are some players who can imitate the nightingale's song exactly by breathing into holes made in water-filled reeds placed across their lips and stopping them with their tongue). Nevertheless, after fifteen days the complex and impressive melodies gradually cease, though one should not suppose that it is because the nightingales are tired or satisfied with singing; as the summer's heat grows their song changes, without any trilling or variations, and they also change colour. Finally in winter they are not seen at all. They do not have pointed tongues as other birds do; they lay a clutch of up to six eggs in early spring.

COMMENT: The nightingale's song was considered one of the classic examples of animal intelligence, together with the spider's web and swallow's nest, and classical accounts make clear that the bird's ability was interpreted in the same way as human musical skill, something which the young nightingale needed to be taught and to practice (also in *Plut. Mor.* 973b). The idea that the hen nightingale teaches its chicks to sing originated with Aristotle (*HA* 536b 17–19), and Pliny improves on this from the birds' habit of responding to each other's song, while Dionysius goes so far as to claim that the nightingale favours those chicks which are musically gifted and kills any which are mute (*On Birds* I.20)). The idea perhaps also stems from human training of nightingales: in Philostratus' *Life of Apollonius of Tyana*, the miracle-worker meets a youth who earns a living by training nightingales, blackbirds and stone-curlews to speak words and whistle tunes (VI.36). Despite Aelian's assertion that a caged nightingale will refuse to sing (*NA* III.40, V.38), they were highly valued as pets, especially among the Romans: Martial depicts among his

list of owners and their pets Telesilla who built a tomb for her nightingale (*Ep.*VII.87.8), and there exists an imperial-period inscription from Syracuse recording the epitaph of a pet nightingale: ‘The nightingale which delighted my soul has perished, and has sped across the sea to the bosom of immortal Aphrodite’ (*IG* XIV.56).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
T. Gantz, *Early Greek Myth: a guide to literary and artistic sources* (Baltimore 1993).
W.F. Jashemski, *The Gardens of Pompeii, Herculaneum and the Villas Destroyed by Vesuvius* (New Rochelle 1979–93).
A.S. McDevitt, ‘The nightingale and the olive: remarks on the first stasimon of Oedipus Coloneus’, in R. Hanslik et al. (eds), *Antidosis: Festschrift für Walther Kraus zum 70. Geburtstag* (Vienna 1972), 227–37.
J. Pollard, *Birds in Greek Life and Myth* (London 1977).
V. Spinazzola, *Pompeii alla luce degli scavi nuovi di Via dell’Abbondanza (anni 1910–1923)* (Rome 1953).
A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).

OWL

Owls are solitary and nocturnal raptors, unique among birds of prey for their forward-facing eyes and silent flight, made possible by the velvet-like texture of their flight feathers – their prey seldom sees, or hears, the owl coming until too late. Owls nest widely, in buildings, hollow spaces in trees and, in the case of some species, in holes in the ground (Morris 2009). They are one of the most widespread of birds; as many as twenty species of owl inhabited the ancient Near East and Mediterranean, and were distinguished by writers, although not always consistently, or in ways which reflect modern species division: classical authors recognised the little owl (*glauks*, *noctua*), tawny owl (*ulula*), eagle owl (*bubo*), eared owls (*otis*, *skops*) and barn owl (*strix*) (Arnott 2007: 55–6). All were familiar inhabitants of town and country; Aristotle provides basic species information – that owls hunt at dawn and dusk, feeding on small prey such as mice, lizards and beetles (*HA* 619b 18–23), and comments on the mobbing of owls by small birds (depicted on an Athenian red-figure skyphos, Brussels R413) and the less well-founded idea of particular enmity between owls and crows (609a 8–16). We find, however, a strong cultural divide in attitudes towards the owl between the cultures of antiquity. Thanks to the Athenian connection between Athena and the little owl, much imagery of owls in this context was disseminated around the Mediterranean, but among the Mesopotamians, Hebrews and Romans the larger species of owl were disliked as birds of ill-omen. Indeed, fear of owls as nocturnal predators fed into the lurid Roman tales of the *strix*, a mythical creature with characteristics of both owl and bat which fed on human intestines (Ovid *Fasti* VI.131.40; Oliphant 1913). Such negative associations continued into Christian mythology, in which the owl was seen as demonic (Salisbury 1994: 133); the modern idea of the ‘wise owl’ is hard to detect except in one or two fables.

1. The 'Queen of the Night' and her owls

*High relief clay plaque, Old Babylonian, 1765–45 BCE;
southern Iraq (British Museum ME 2003-7-18,1)*



COMMENT: This large plaque, made of baked straw-tempered clay, is modelled in high relief and was originally erected in a religious sanctuary. It depicts a curvaceous naked woman wearing a horned headdress (characteristic of Mesopotamian deities) and holding a rod and ring of justice (likewise symbols of divinity). Her long wings (once painted in multicolours) hang downwards, thereby demonstrating her role as goddess of the Underworld – perhaps Lilitu (known in the Hebrew bible as the demoness Lilith) or Ereshkigal or even Ishtar in a chthonic guise (Collon 2005: 39–45). The goddess stands on the backs of two lions (a scale pattern beneath them indicates mountains) and her legs end, startlingly, in the talons of a bird of prey, similar to those of the two owls that flank, and seem to guard, her. The owls themselves have been identified as barn owls, although from the remaining traces of paint it appears that the artist took certain liberties with their colouring and with certain anatomical details: the legs of barn owls are covered with white

feathers and down but on the plaque feathers appear only on the upper legs so that, in effect, the owls are given miniature versions of the goddess' legs and talons (Collon 2005: 36).

The owl is a fitting companion for the underworld goddess and in Akkadian sources the owl (*qadû*) is associated with the chthonic god Ea. From the nocturnal habits of the owl comes the consequent Mesopotamian association of the bird with sleep, dreams and bad omens. A text known as *Dumuzi's Dream* contains an ominous image: 'An owl has caught a lamb in the sheepcote', and its interpretation is clear and direct: '[the] dream bodes no good, nor may it be propitiated' (Husser 1999: 37). The owl's haunting call disturbs human rest and therefore its hoot was regarded as a message of ill-fortune: 'The owl is the bird of Ea. Its cry is, "Lament, lament"' (Lambert 1970: 114). Known to the Mesopotamians as (among other things) *ukuku* ('sleeping bird'), the owl was also 'the bird of depression (lit. 'heart-sadness'), (which) makes its nest in your gateways, established for the land' (*Cursing of Agade* 256–9) and was 'the bird of destroyed cities . . . the sleep-bird, bird of heart's sorrow' (*Lament for Eridug* 81–2). Perhaps unsurprisingly, owl burials have been discovered in human cemeteries in parts of the Near East and the Aegean, particularly in Phoenicia and Crete (Schmitz 2009).

2. A bird of desolation

Hebrew bible, Psalms 102:1–7

Hear my prayer, Lord;
let my cry for help come to you.
Do not hide your face from me
when I am in distress.
Turn your ear to me;
when I call, answer me quickly.
For my days vanish like smoke;
my bones burn like glowing embers.
My heart is blighted and withered like grass;
I forget to eat my food.
In my distress I groan aloud
and am reduced to skin and bones.
I am like a desert owl,
like an owl among the ruins.
I lie awake; I have become
like a bird alone on a roof.

COMMENT: The Hebrew psalmist adopts the guise of an emaciated sufferer of malnutrition and after employing three similes to imply a dangerously ill condition and three brief self-portraits, conjures up the owl (*qā'āt* – 'eagle owl') as an image of despair. The biblical image of the owl shares common trends with the rest of the Near East: it was considered a bird of ill-omen and, moreover, had a close association with sickness, misery and loss. It was also a powerful symbol of urban destruction. In an eighth-century BCE treaty recorded in an Aramaic inscription from Sefire, the owl serves as an emblem of desolation. Near the conclusion of the oath threatening the city of Arpad with utter destruction should it prove disloyal comes this curse: 'And may Arpad become a mound to [house the desert animal and the] gazelle and the fox and the hare and the wild-cat and the owl and the [. . .] and the magpie!' (Fitzmyer 1967: 15). The same theme of the owl among ruins is repeated elsewhere in the Hebrew bible: it is an image employed in an oracle

concerning Edom from the prophet Isaiah (34:11), who declares that the eagle owl (*qā'āt*) will inherit the devastated land, and that another possible type of owl (*yanšūp*) will also dwell in it. The eagle owl also roosts on the capitals of the desolated Assyrian city of Nineveh in the prophetic vision of Zephaniah 2:14.

Perhaps because of its association with ill-fortune, the owl is included in the Pentateuch among the birds prohibited as food (Leviticus 11:16–18; Deuteronomy 14:15). The biblical prohibition itself seems to imply that owls were sometimes included in the diet of Canaanite peoples living alongside the ancient Hebrews.

3. A barn owl from Egypt

Limestone plaque, Ptolemaic period, c. 150 BCE (British Museum E38276)



COMMENT: The barn owl (*Tyto alba*) depicted on this plaque with great precision and clarity is a common resident of Egypt, where it nests in trees, buildings and ruins whence it hunts at night. The artist has chosen to depict the bird's most characteristic features, its face and eyes, by showing it frontally. When an owl is alerted to some movement, it cannot move its eyes to view it since they are fixed into its eye-sockets, and therefore the entire head must move for the bird to switch its gaze. The artist has captured the owl as it is most often viewed in nature, with its eyes and head focused to the front. This breaks with the strict conventions of Egyptian art where all living-species are depicted in profile and provides, therefore, a radically naturalistic nature-portrait.

The owl is used within the hieroglyphic alphabet for the letter and sound-value ‘*m*’, and it is in this alphabetic form that the owl is most represented in Egyptian art; in fact there are very few depictions of owls in any other context (Houlihan 1986: 110). Numerous plaques exist from the Late Period and the Greco-Roman eras which show owls (as well as quail chicks, house martins or swallows, and falcons; Bailleuil-LeSuer 2012: 167–76) and they were clearly showcasing the talents of the artists who created them. Scholarship is divided over the use and meaning of them: were the plaques sculptors’ models or votive offerings? No consensus has yet emerged, although it is possible that from the Ptolemaic period onwards, the owl was increasingly regarded as an aspect of cultic symbolism.

4. Owls roosting in the rafters

Plutarch Life of Lysander 16

After making these arrangements Lysander sailed for Thrace, but he sent what remained of the public money, and the gifts and crowns which he had received on his own account (since many people had naturally made him presents as being a most powerful man and practically speaking in control of the whole of Greece) back to Lacedaimon in the hands of Gylippus, who had commanded the campaign in Sicily. Gylippus, so they say, unpicked the seams of the moneybags from underneath and extracted a considerable amount of money from each one; then he stitched the bags back up again, unaware that there was a note inside each bag indicating the amount it contained.

When he reached Sparta Gylippus hid the money he had stolen under the roof-tiles of his house, then handed the moneybags over to the ephors, showing them the unbroken seals. When the bags were opened and the money counted, the discrepancy between the sum present and the notes came to light, but the ephors were unable to understand what had happened, until one of Gylippus’ servants told them in a riddling way, that there were many owls roosting under his roof. For at that time, so it seems, the design on most coins was the owl, since it was the symbol on the Athenian coinage.

COMMENT: The joke at the heart of this story, the ‘owls in the rafters’, indicates how closely the symbol of the owl and the city of Athens were linked in the Greek mind. Athena’s owl – the little owl, *Athene noctua* – first appeared on the Athenian coinage in the sixth century BCE, and it continued in an unbroken tradition, though with occasional changes of detail, to the first century BCE (Meillier 1970). Athenian coins thus came to be known as ‘owls’, and this in turn generated puns and proverbs: ‘bringing owls to Athens’ (Ar. *Birds* 301) is the Greek equivalent of ‘carrying coals to Newcastle’, while the hero of Aristophanes’ *Birds* assures the judges that if they look favourably on the play, ‘the owls of Laureion will never desert you, but will dwell in your houses, nest in your purses and hatch out small change’ (1105–8). Our sources imply that little owls were frequent inhabitants of Greek towns, and would readily nest in urban buildings: Ar. *Lys.* 760–1 refers to owls hooting around the Acropolis in Athens.

5. Athena's owl

Attic red-figure owl-skyphos, New York Metropolitan Museum of Art no. 41.162.127, fifth century BCE (Rogers Fund, 1941). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: This red-figure skyphos is one of a large group of such cups, known from their decoration as 'owl-skyphoi'. The owl-skyphos first appeared as an Athenian pottery product after 480 BCE, and was widely exported: most are found in Italy, but they went as far as Spain, Lycia, North Africa and the Black Sea. Both sides carry the same image of a forward-facing owl between sprigs of olive, identical to that on Athenian coinage, indicating that this is Athena's owl (Johnson 1953, 1955). It is not surprising to find owl-imagery on Attic pots – they often appear with Athena on Panathenaic amphorae, and an over-life-size marble votive owl was found on the Acropolis (now to be seen at the entrance to the Acropolis Museum) (Meillier 1970). What is surprising, however, is that when production of owl-skyphoi ceased at Athens, potters in Southern Italy, in Lucania, Apulia and later Campania, took over the production, retaining both design and shape. Boardman's comparison of the Athenian versions to 'holiday souvenirs' (1989: 39) is thus misplaced: the combination of shape and image was plainly valued in the Greek cities of Italy for its own sake, and the penetration of the imagery contributed to the identification of the owl as Minerva's symbolic animal at Rome. The owl accompanies Minerva on Roman coins from the first century BCE.

6. Ill-omened owls

Pliny Natural History X.34–5

Night-hunting birds also have hooked claws, birds such as the *noctua* (little owl), the *bubo* (eagle-owl) and the *ulula* (tawny owl), all of which have poor eyesight in the daytime. The eagle-owl is a funereal bird and is considered a particularly bad omen, especially at public auspices; it inhabits deserts and places which are not only unpopulated but frightening and inaccessible; a terror of the night, its cry is not a normal bird's song, but a groan. For these reasons if it is seen in the city, or in daytime at all, it is a grave omen; and yet I know of several incidents in which an eagle-owl has perched on the roof of a private house without fatal consequences for the occupants. It does not fly directly to its goal, but diagonally. When an eagle-owl entered the sanctuary of the Capitol in the consulship of Sex. Palpellius Hister and L. Pedanius [43 CE], a purification of the city was carried out on the Nones of March that year.

COMMENT: Pliny's brief description of owls focuses on the ominous role of the *bubo* or eagle-owl. The uncanny aspects of owls, as night-flying predators with a silent flight and huge, unblinking eyes, made them an obvious choice as a bad omen, and references to owls as sinister are found throughout Greek and Roman literature. Theophrastus' *Superstitious Man* is worried by an owl's hoot (*Char.* XVI.8), while Ovid uses a hooting owl to accompany an ill-fated night-time journey (*Met.* X.452–3). Even the sight of an owl in Rome could be reported as a public omen (Rasmussen 2003: 90–110), although Pliny himself comments that an owl perching on a roof did not necessarily presage a death in the household. Only the *noctua*, Little Owl, seems to have been exempt from such negative associations, and through its link with Athena/Minerva it could occasionally serve as a good omen. An owl is supposed to have appeared among the ships before the battle of Salamis and settled on the rigging, foretelling the Greek victory (Plut. *Them.* 12.1), while Agathocles, tyrant of Syracuse, apparently manufactured his own omen to encourage his army in North Africa in 310 BCE: before battle he let loose some owls at various points in the camp, which were taken as an indication of Athena's support and favour (Diod. XX.11.3–4).

7. Owls and fullers at Pompeii

a) Graffito from the fullonica of M. Fabius Ululitremulus, Pompeii (CIL IV.9131)

Fullones ululamque cano, non arma virumq(ue) / I sing of fullers and the owl, not arms and the man.

b) Graffiti from the portico of the House of the Triclinium, Pompeii (CIL IV 4112, 4118)

Cresce(n)s fullonibus ullulau(e) canont. / Crescens (and his friends) sing to the fullers and the owl.

Cresce(n)s fullonibus et ululae suae sal(utem). ulula est. / Crescens greets the fullers and their owl. It is an owl.

COMMENT: The first of these Pompeian graffiti comes from the entrance to the fuller's workshop of Marcus Fabius Ululitremens, the second and third from the House of the Triclinium, on the pillars next to the dining-room. Together they show us an intriguing connection between the guild of the fullers and the *ulula*, the tawny owl. The first inscription accompanies a drawing of Aeneas and his father Anchises, and parodies the opening line of the *Aeneid*; the owner of the workshop carried the very unusual cognomen of Ululitremens – 'Owl-fearer'. While in general owls figure rarely in the paintings and mosaics of Pompeii, inside another *fullonica*, that of L. Veranius Hypsaesus, was found a wall-painting which includes an owl perched on a drying frame (now in Naples Museum). The second group of graffiti, by another fuller, L. Quintilius Crescens, includes several greetings to the fullers and their totem, perhaps written during a carouse, accompanied by a drawing of an owl which is so poorly executed that another hand has written underneath, 'It's an owl.' Scholars have found the link between the fulling trade and the owl difficult to explain; the most widely accepted theory (Moeller 1976: 89–90) sees the owl as representing Minerva, divine patron of the guild, although it is hard to account in this way for Ululitremens' fear of the bird. Other suggestions see a link with a proverbial phrase in Varro, 'men hate him as the *fullo* fears the owl' (*Men. Sat.* 529), though the *fullo* in this context may be a kind of scarab beetle rather than a textile worker. It is also unclear whether the owl was a specifically Pompeian totem among the *fullones*, or whether it was more widely adopted; the multiple references in Pompeii are not repeated elsewhere.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 R. Bailleuil-LeSuer (ed.), *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
 J. Boardman, *Athenian Red Figured Vases: the classical period* (London 1989).
 D. Collon, *The Queen of the Night* (London 2005).
 J.A. Fitzmyer, *The Aramaic Inscriptions of Sefire* (Rome 1967).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 J.-M. Husser, *Dreams and Dream Narratives in the Biblical World* (Sheffield 1999).
 F.P. Johnson, 'An owl-skyphos', in G. Mylonas and D. Raymond (eds), *Studies Presented to D.M. Robertson*, vol. 2 (1953), 96–105.
 F.P. Johnson, 'A note on owl-skyphoi', *AJA* 59 (1955), 119–24.
 W.G. Lambert, 1970. 'The Sultantepe Tablets: IX. The Birdcall Text', *Anatolian Studies* 20 (1970), 111–17.
 C. Meillier, 'La chouette et Athéna', *REA* 72 (1970), 5–30.
 W.O. Moeller, *The Wool Trade of Ancient Pompeii* (Leiden 1976).
 D. Morris, *Owl* (London 2009).
 S.G. Oliphant, 'The story of the *strix*', *TAPA* 44 (1913), 133–49.
 J. Pollard, *Birds in Greek Life and Myth* (London 1977).
 S.W. Rasmussen, *Public Portents in Republican Rome* (Rome 2003).
 J.E. Salisbury, *The Beast Within: animals in the Middle Ages* (London 1994).
 P.C. Schmitz, 'The owl in Phoenician mortuary practice', *Journal of Ancient Near Eastern Religions* 9.1 (2009), 51–85.
 A. D. Trendall, *Red Figure Vases of South Italy and Sicily* (London 1989).

FALCON/HAWK

Some sixty species make up the family *Falconidae*. They vary widely in shape and habit, though generally the species of *Falco* is subdivided into four groups: the insect-eating hobbies, the bird-killing merlins, the peregrines and the desert falcons. The latter two are dark-eyed hunters of the

open air and high altitudes; peregrines are fond of taking avian prey while desert falcons feed on reptiles and small mammals. All these species were all found throughout Egypt and the Near East in antiquity and, unsurprisingly, these beautiful killers enter early into human myth, ritual and society: according to MacDonald, 'striking parallels exist between the mythico-religious roles of falcons across diverse cultures and over many millennia' (2006: 51). The association of the falcon with the human soul is particularly strong and is found right across Eurasia, the Middle East and into Europe.

The Greek term *hierax* and Latin *accipiter* both denote small and medium-sized birds of prey, distinct from the larger eagle, vulture and kite and from the nocturnal owl. Those native to Greece and Italy included the buzzard, goshawk, peregrine falcon, harrier and kestrel, but in general ancient writers found it unnecessary to distinguish strongly between swift predators of small birds, particularly as they were birds of the wild rather than of town or country. Indeed there was an odd belief that the cuckoo metamorphosed into a hawk for half the year, based on a misunderstanding of the cuckoo's migratory habits, and the similarity of its plumage to that of the sparrowhawk. This theory was comprehensively debunked by Aristotle in the fourth century BCE (*HA* 563 b 14–29), but nevertheless continued as a folk belief (e.g. Plut. *Ar.* 30). While not as present in literature and art as the more impressive eagle, hawks were admired for their speed, agility and aggression: Hesiod uses the well-known fable of the hawk catching the nightingale to make the point that might is right and the powerful can do what they wish (*W&D* 202–12). Later classical writers, however, gradually became influenced by Egyptian attitudes to the hawk; Aelian, for example, largely preserves Egyptian traditions about the bird (*NAVII.9*, *X.14*, *XI.39*).

1. The sacred falcon

Line drawing of the figure of a falcon, Egypt, Ramesside era XIX or XX Dynasty



COMMENT: The ubiquitous Horus falcon of Egyptian art is a stylised version of the real-life bird, including features common to four species of hawk: Eleonora's falcon (*Falco eleonora*), the Eurasian hobby (*Falco subbuteo*), the lanner falcon (*Falco biarmicus*) and the peregrine falcon (*Falco peregrinus*). The bird represents the falcon deity Horus, the sky god and son of Osiris, who was closely identified with the living pharaoh. Houlihan (1986: 48) notes that, 'if the Egyptians had a national bird, the Horus Falcon would doubtless have been it'.

'Horus' means 'the distant one' or 'the high one', referring no doubt to the falcon's ability to soar high into the air. Its keen sight and love of altitude made the bird a prominent solar symbol, and while the Egyptians had many falcon deities – Re, Montu, Sokar, Sopdu, Nemty, Dunanwi (Quirke 2001; Wilkinson 2003: 200–11) – none attained the supreme importance of Horus, who in falcon-guise is the most prominent deity in Egyptian art. Consequently, real falcons were considered to be living manifestations of the god and became important players in temple and festival rituals. At Edfu, Horus' principal seat of worship, a live falcon was decorated in ritual regalia and presented to throngs of worshippers on an annual basis; this privileged falcon was kept in a temple grove of sacred falcons and upon its natural death was mummified and buried with great solemnity.

The pharaoh's association with this important cultic bird is expressed early on in Egypt's history: in the Pyramid Texts (c. 2500 BCE) Utterance 273 notes that King Unis is 'a falcon, fiercest of forms of the Great Hawk', while Utterance 245 contains the speech of the dead king himself: 'I come to you O Nut: The king has come to you . . . I have given my father to the earth and I have left Horus behind me. My wings grow strong like the wings of a falcon, my double plume is like the falcon's.' The strong association between the king and the falcon continues in later literature and one Ramesside text thinks of the pharaoh as 'a divine falcon when he sighted small birds at a [hole] . . . like a falcon among little birds and small fowl . . . like a falcon, furious when he sees small.' The falcon image is particularly evoked in the pharaoh's warrior aspect and therefore Egypt's enemies declare that 'He [the king] is after us like a divine falcon . . . like a falcon among small birds . . . he crushes millions' (see further Bailleul-LeSuer 2012: 135–7, 178–82). The image is found in Near Eastern texts too: a Sumerian prayer-letter from the suppliant Sin-iddinam to the powerful Nin-Isina begs that, '[as for me], like a bird fleeing from a falcon, I am seeking to save my life!'

Hundreds of thousands of 'falcon' mummies have been discovered in the animal cemeteries of Egypt (Ikram 2005). Dipped in tar or preserved in natron, the bird mummies were created as votive offerings for pilgrims visiting shrines and temples. The temple of Isis, the mother of Horus, constructed by Nectanebo II at Saqqara contained some 100,000 mummified votive falcons (MacDonald 2006: 51). Given that falcons are notoriously difficult to breed in captivity, it would stand to reason that other birds (including kites, vultures and even small song-birds) were mummified in place of the sacred bird by the enterprising priests and temple officials to meet pilgrims' demands. Scientific investigation of bird mummies using X-rays and CT scans show that the Egyptians did not carefully differentiate between different species of raptors and that several different species of birds of prey could be mummified and passed off as the Horus Falcon.

2. The warrior hawk

Homer Iliad XXII.139–44

As a falcon of the mountains, swiftest of all birds, easily stoops upon the timid dove, and she rises up in fear; the falcon screams shrilly as he rushes to the attack, over and over, in his desire to catch her. So Achilles rushed straight at Hector, relentless in his attack, and Hector ran from him, swift-footed, under the walls of Troy.

Homer, *Odyssey* XV.525–8

As Telemachus uttered these words, a bird flew up on the right, a peregrine falcon, swift messenger of Apollo; in its talons it held a dove which it plucked, sending feathers fluttering to the earth between Telemachus and the ship.

COMMENT: The eagle may be the archetypal raptor in classical literature, but the hawk appears in poetic similes surprisingly often, from Homer onward, offering as martial an image as the larger eagle. Some ‘raptor’ shield devices shown in Greek art are in fact clearly identifiable hawks with a distinctive silhouette of V-shaped wings (e.g. Normand 2015: fig. 34 = LIMC Hermes 676). The hawk was admired as a predator in ancient culture because although small it was feared by larger birds (Ael. *NAV*.50; Isid. *Etym.* XII.7.55), and Roman authors emphasise its bloodthirstiness: Silius Italicus recounts an omen given to Hannibal of a hawk which kills fifteen doves and is hungry for more (*Punica* IV.105–33). Homer’s similes, however, are more strongly based on observation, noting both the shrill cry of the hawk as it dives on its prey and its characteristic plucking of the feathers from the dove before eating.

3. The nature of hawks

Aristotle, *Historia Animalium* 620a 17–b5

Of hawks the most powerful is the *triorches* (buzzard), then the *aisalon* and the *kirkos* (peregrine falcon). Other hawks include the *asterias* (goshawk), the *phassophonos* (‘pigeon-killer’) and the *pternis* (not identified). The broadwinged hawks are called *hypotriorchoi* (lesser buzzards), and other kinds are the *perkoi* (hobbies) and the *spiziai* (not identified). The smallest are the *eleioi* (marsh harriers) and *phrynologoi* (‘toad-pickers’). These last find their prey easily as they fly low along the ground.

Some say that there are no fewer than ten kinds of hawk, and they have distinctive characteristics. Some stoop on their prey when it is sitting on the ground and seize it, but do not take birds on the wing. Others hunt birds which sit in trees or on other perches, and not ground-sitting birds or those in flight. And a third group do not take ground-sitting or perching prey, but birds as they fly. It is also said that doves recognise hawks of each of these types as they approach, and if their attacker is an aerial hunter, they remain perched wherever they are, while if the attacker is a ground-hunter, they immediately rise into the air.

In the region of Thrace once called Kedrepolis, men hunt birds in the marshes with the aid of hawks. The men use sticks to flush the birds from the reeds and bushes, making them fly up, and the hawks appear from above and pursue them. The frightened birds then settle back to the ground, and the hunters are able to strike them with their sticks and catch them. They share their catch with the hawks, throwing some of the small birds into the air, where the hawks seize them.

COMMENT: Aristotle’s discussion of hawks demonstrates the difficulty of trying to map ancient categories of animal on to modern scientific species: he is familiar with the group of ‘small diurnal raptors’, but distinguishes between them variously by size, distinctive colour or habits. Some names, noted above, map onto species which we recognise, but others are hard to associate with just one modern species. There was, furthermore, little agreement between natural historians at different periods: Aristotle says there were at least ten kinds of hawk and names eleven, but Pliny

(NH X.21–3) says there are sixteen kinds (of which he names only three, the *aegithus*, *triorchis* and *epileus*). Under the circumstances Aristotle's distinction by mode of hunting seems more immediately useful than the application of names, at a time when patterns of migration, changes of plumage and variations in appearance by age and sex were not well understood.

Aristotle's brief but intriguing account of hunting with hawks in Thrace is repeated by several other writers – the author of the pseudo-Aristotelian *Mirabilia* locates it in the region of Amphipolis (841b). This is not falconry as such – there is no indication that the hawks were trained to catch the prey for the hunter, though this was known in the Near East (see WORKING ANIMALS no. 16) – but a practice in which a captured hawk was taken by the hunter to terrorise smaller birds simply by its presence, making them easy to net as they froze in fear on their perches (Opp. *Cyn.* I.62–6; Normand 2015: 547–54). True falconry does appear in the later Roman empire, when the hawk becomes a canonical part of the rich man's hunting stable, alongside his hound and horse (Paulin. *Euch.* 143–5; Sid. Apoll. *Epist.* III.3.2, IV.9.2). Images on mosaics from the same period also show hunting with hawks: a fifth-century CE mosaic from Carthage (Bardo Mus. 3576; Dunbabin 1978: fig. 43) depicts hare-hunting with hounds and hawks, though many of the 'hawks' taking hares identified in earlier Greek and Roman art are in fact eagles.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 R. Bailleul-LeSuer (ed.), *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
 K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 S. Ikram, *Divine Creatures. Animal Mummies in Ancient Egypt* (Cairo 2005).
 H. MacDonald, *Falcon* (London 2006).
 H. Normand, *Les rapaces dans les mondes grec et romain: categorisation, representations culturelles et pratiques* (Bordeaux 2015).
 S. Quirke, *The Cult of Ra. Sun-worship in Ancient Egypt* (London 2001).
 A. Sami, *Persepolis (Takht-i Jamshid)* (Shiraz 1970).
 D. Serjeantson, *Birds (Cambridge Manuals in Archaeology)* (Cambridge 2009).
 A.S. Shahbazi, 'On Varna the royal falcon', *Zeitschrift der Deutschen Morgenländischen Gesellschaft Wiesbaden* 134.2 (1984), 314–17.
 R.H. Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003).

EAGLE

Humans have venerated the aggressive potency of the eagle across the ages and civilisations, and consequently the eagle is one of the most frequently depicted animals in ancient art, as an attribute of the gods and as a symbol of power: Sumerian and Assyrian kings used the eagle as the supreme symbol of royal rule, while the eagle standard of the Roman legions is one of the best-known sigils from the ancient world. Such figurative depictions, however, tell us little about the eagle as a living bird, and there was in practice a strong disjunction between real eagles, which inhabited remote regions and avoided contact with humans, and the ubiquitous symbolic eagle.

The family *Accipitridae*, birds of prey, includes eagles, hawks, kites, harriers and buzzards, but there is in fact little taxonomic distinction attaching to these terms; eagles are usually distinguished by their large size and wingspan, powerful talons and heavy hooked beaks. As Arnott (2007: 3) notes, there are eight identified species of eagle in the Mediterranean today and four species of vulture, along with kites, buzzards and harriers, and it is not at all clear that ancient

cultures made any real distinction between them. Greek and Roman writers certainly used the terms *aëtos* and *aquila* (in Greek and Latin respectively) as very broad designators for any large raptor, including kites and vultures. Columella, for instance, advises those keeping ducks on their estates to net the enclosure to keep out *aquilae* (*De agri*.VIII.1.5 = DUCK no. 3), but eagles rarely prey on farmed animals – the behaviour is more typical of hawks or kites. Eagles' behaviour was in general difficult to observe, and much of what is recorded in ancient sources follows preconceptions about their divine role, such as claims that they stare into the sun, or battle with snakes (Ael. *NA* II.26; Plin. *NH* X.10; Schmidt 1983); indeed the importance of eagles in omens often led to their being credited with completely unnatural behaviours (below no. 6).

A cluster of classical stories tell of eagles found as chicks and raised to be pets, demonstrating loyalty and affection to their owners (Ael. *NA* II.40, VI.29; Plin. *NH* X.18). One can find modern parallels for the domestication of golden eagles, but reading the ancient stories together reveals a common theme of the eagle immolating itself on a funeral pyre after the death of the owner, and hence they must be considered moralistic stories rather than reflections of reality.

1. Etana and the eagle

a) Neo-Assyrian version of an Old Babylonian myth (after Foster 1996: 437–9)

He cut off his wings, pinions, and tail feathers, [he plucked him and ca[st him into] a p[it], that he should die [there] of hunger [and thirst]. [As for him, the eagle] . . . He kept on beseeching Shamash day after day: 'Am I to die in a pit? Who would know how your punishment was imposed upon me?' Save my life, me, the eagle! Let me cause your name to be heard for all time.'

Shamash made ready to speak and said to the eagle, 'You are wicked and have done a revolting deed. You committed an abomination of the gods, a forbidden act. Were you (not) under oath? I will not come near you. There, there! A man I will send you will help you.' Etana kept on beseeching Shamash day after day, 'O Shamash, you have dined from my fattest sheep! O Netherworld, you have drunk of the blood of my (sacrificed) lambs! I have honoured the gods and revered the spirits, dream interpreters have used up my incense, gods have used up my lambs in slaughter. O lord, give the command! Grant me the plant of birth! Reveal to me the plant of birth! 'Relieve me of my burden, grant me an heir!' Shamash made ready to speak and sa[id] to Etana, 'Go (your) way, cross the mountain. Find a pit, look inside, an eagle is cast within it. He will reveal to you the plant [of birth].' According to the command of the warrior Shamash, Etana went (his) way. He found the pit, he looked inside, [the eagle was cast] with[in it]. There he was for him to bring up!

. . . The eagle made ready to speak, [saying to Etana] . . . 'Put [your arms] against my sides, put [your hands] against my wing feathers.' He put [his arms] against his sides, he [put his hands] against his wing feathers. [When he had borne him aloft] one league, 'Look, my friend, how the land [is now]! The land's [circumference?] has become one fifth of (its size). The vast sea has become like a paddock.' [When he had borne him aloft] a second league, 'Look, my friend, how the land [is now]! The land has become a garden plot and the vast sea has become a trough.' When he had borne him aloft] a third [league], 'Look, my friend, how the land [is now]!'

I looked, but could not see the land! Nor were [my eyes] enough to (find) the vast sea! 'My friend, I won't go up to heaven! Set me down, let me go off to my city!' One

league he dropped him down (?), then the eagle plunged and caught him in his wings. A second league he dropped him down (?), then the eagle plunged and caught him in his wings. A third league he dropped him down (?), then the eagle plunged and caught him in his wings. Within three cubits of the earth [he dropped him down]. The eagle plunged, and caught him in his wings]. The eagle [] and . . . while he, Etana [. . .].

b) Line drawing of a detail of an Akkadian dark green serpentine cylinder seal, c. 2400–2200 BCE (London, British Museum 129480)



COMMENT: The Myth of Etana is a very ancient story (dating to c. 2334–2279 BCE) dealing with the exploits of a Sumerian king of Kish who ascends to heaven on the back of an eagle to request the Plant of Birth from the gods in order that he might be blessed with a son and heir. A fragment of the Myth of Etana was discovered in King Assurbanipal's library at Ninevah, dating from the seventh century BCE, and its overlaps with an Old Babylonian version of a thousand years earlier are manifold. The legend begins with the story of the conflict between the eagle and the snake (see SNAKE no. 5) but switches focus and explores the story of how Etana saves the eagle from imprisonment and starvation and how the eagle and the king return to the city of Kish. In Kish, Etana has a series of dreams which encourage him to attempt to reach heaven. The rest of the text tells of Etana's dreams, the eagle's dream-interpretation, the dream of Etana's wife (in which she seems to see a long and prosperous reign for Etana) and a second flight by Etana and the eagle where they meet with the gods.

The story contains one of the first instances of a popular literary *topos* found across world civilisations: the notion of a human ascending to heaven on the back of an eagle (see also Normand 2015: 270–2). This bird was commonly thought to inhabit mountain tops or even the realms beyond the clouds, which helps explain the common ancient association between the eagle and numerous sky deities or weather gods. The story was familiar in Mesopotamian art, such as the cylinder seal depicted here: Etana is being lifted off the ground by the eagle as two seated dogs face each other on the ground and bark as if in agitation at the wondrous happening.

2. Eagles, gods and Hittite royalty

a) Telipinu myth (after Hoffner 1998: 18–19)

The Storm-god concerned himself for his son Telipinu: 'My son Telipinu is not here. He became angry and took away for himself everything good.' The great gods and the lesser gods began to search for Telipinu. The Sun-god dispatched the swift eagle: 'Go search the high mountains! Search the deep valleys! Search the blue sea!' The eagle went, but he did not find him. He brought back a report to the Sun-god: 'I didn't find him, the honoured god Telipinu.' The Storm-god said to the Mother-goddess: 'What will we do? We will perish from hunger!' The Mother-goddess said to the Storm-god: 'Do something, Storm-god! You go search for Telipinu!'

b) Hittite Foundation Ritual, KUB 29.1 i 50 ii 10 (Collins 1989: 115)

When the king comes into the house then the Throne calls the eagle (saying): 'Go. I am sending you to the Sea. But when you go, look into the field and forest, who(ever) remains there.' And that one (the eagle) answers, 'I have looked into (them) and Isdustaya (and) Papaya, the infernal ancient deities, the in-laws(?), are sitting there, crouched.' He (the Throne) answers: 'And what are they doing?' That one (the eagle) answers him: '(One) has a distaff, they have full spindles. They are spinning the years of the king, and there is no limit to the number of the years (they spin for him).'

c) Ritual for the Foundation of a New Palace (Collins 1989: 114–15, 126–9)

When the king comes into the house, then the throne calls the eagle (saying): 'Go. I am sending you to the Sea. But when you go, then look into the field and forest, whoever remains there.'

That one (the eagle) answers, 'I have looked into (them) and Isdustaya (and) Papaya, the infernal ancient deities, the in-laws(?) are sitting there, crouched.'

He (the Throne) answers: 'And what are they doing?' That one (the eagle) answers him: '(One) holds a distaff, (they) hold full spindles.'

They are spinning the years of the king. Of the years a limit to their number is not to be seen.'

c) Ritual for the Hittite king and queen (Collins 1989: 126–9)

[A]s the Sun God, the Storm God, the Heaven and the Earth (are) eternal, let the king and queen and (their) children be eternal.

Then I release the eagle to the sky again, and after it I say these (words): 'I have not releas[ed] it, the king and queen have released it. Go now.'

To the Sun God and the Storm God say, 'As the Sun God (and) the Storm God (are) eternal, let the king and queen likewise be eternal.'

d) Benedictions for Labarnal reign of Hattusili I (Collins 1998: 19)

His frame is new, his breast is new, his penis is new, his head is of tin, his teeth are those of a lion, his eyes are (those) [of] an eagle, and he sees like an eagle.

COMMENT: In Hittite culture the eagle was the only creature which received divine status. Because of its speed, strength and unmatched eyesight, the eagle was used extensively in Hittite royal rites and ceremonies, and also acted as a messenger for the gods and between the king and the gods. In some royal rituals (such as b above) it is therefore assigned a 'speaking' role. The image of the eagle was used to enhance the person of the king and of the royal family as a whole: a double-headed eagle adorns the gate of the royal palace at Alaca Hüyük and may well have served as an emblem of the royal house (as in many subsequent cultures – see Rogers 2015: 82–106). The Hittite Ritual for the Foundation of a New Palace has an eagle receiving instructions from the deified Throne of the king, which in itself was a symbolic abstraction of monarchy. There is little doubt that in a ritual designed to bring blessings to the royal couple, a live eagle was held above the heads of the king and his wife as an incantation was recited (c, above). The king was in fact supposed to take on the qualities of the eagle (as well as the lion) and in the so-called Benedictions for Labarna, composed for Hattusili I, an incantation exalts the physicality of the king enjoying the qualities of an eagle.

3. Biblical eagles

a) Deuteronomy 28:49, 32:10–12

The Lord will bring a nation against you from far away, from the ends of the earth, like an eagle swooping down, a nation whose language you will not understand, a fierce-looking nation without respect for the old or pity for the young. . .

In a desert land he found him,
in a barren and howling waste.
He shielded him and cared for him;
he guarded him as the apple of his eye,
like an eagle that stirs up its nest
and hovers over its young,
that spreads its wings to catch them
and carries them aloft.
The Lord alone led him;
no foreign god was with him.

b) Obadiah 1:4

'Though you soar like the eagle and make your nest among the stars, from there I will bring you down,' declares the Lord.

c) Job 9:25–6, 39:26–8

My days are swifter than a runner;
they fly away without a glimpse of joy.
They skim past like boats of papyrus,
like eagles swooping down on their prey. . .
Does the hawk take flight by your wisdom
and spread its wings toward the south?
Does the eagle soar at your command
and build its nest on high?

It dwells on a cliff and stays there at night;
a rocky crag is its stronghold.

d) Jeremiah 48:40, 49:16, 22

This is what the Lord says: 'Look! An eagle is swooping down, spreading its wings over Moab. . .

The terror you inspire
and the pride of your heart have deceived you,
you who live in the clefts of the rocks,
who occupy the heights of the hill.
Though you build your nest as high as the eagle's,
from there I will bring you down,'
declares the Lord. . .

Look! An eagle will soar and swoop down,
spreading its wings over Bozrah.
In that day the hearts of Edom's warriors
will be like the heart of a woman in labour

e) Ezekiel 17:3–4, 7

Say to them, 'This is what the Sovereign Lord says: A great eagle with powerful wings, long feathers and full plumage of varied colours came to Lebanon. Taking hold of the top of a cedar, he broke off its topmost shoot and carried it away to a land of merchants . . . But there was another great eagle with powerful wings and full plumage. The vine now sent out its roots toward him from the plot where it was planted and stretched out its branches to him for water. . . '

f) Proverbs 30:18–19

There are three things that are too amazing for me,
four that I do not understand:
the way of an eagle in the sky,
the way of a snake on a rock,
the way of a ship on the high seas,
and the way of a man with a young woman.

g) Deir 'Alla Inscription 2.27 (The Book of Balaam, son of Beor)

It shall be that the swift and crane will shriek insult to the eagle,
And a nest of vultures shall cry out in response.
The stork, the young of the falcon and the owl,
The chicks of the heron, sparrow and cluster of eagles;
Pigeons and birds, [and fowl in the s]ky.
And a rod [shall flay the catt]le.
Where there are ewes, a staff shall be brought. . .
Hares eat together! Free[ly?], oh beasts [of the field]!
And [freely] drink, asses and hyenas!

COMMENT: Birds are, by and large, taken for granted in the bible (see SPARROW). The eagle, however, was very different; it impressed the ancient Hebrews not only for its masterful control of the skies, but for its eyesight, strength and ruthless hunting prowess (Rogers 2015: 66–8). Images of the eagle in biblical texts allude to its speed in flight and its vast wing-span and, most notably, the heights in which it dwells and from which it attacks. Therefore the retribution of Yahweh was said to come ‘as an eagle’ (Hosea 8:1), but the Israelite god could also rescue with the attributes of the eagle: ‘You have seen what I did to the Egyptians, and how I bore you on eagles’ wings and brought you to myself’ (Exodus 19:4; cf. Deuteronomy 32:11), paralleling the image of the eagle as a divine messenger in Hittite mythology (see above). The references to the eagle (and other raptors) in the Deir ‘Alla inscription show similar Levantine conceptions of the bird.

The eagle-image was extended to Yahweh’s physical presence too: ‘(He) will deliver you from the snare of the fowler and from the deadly pestilence; he will cover you with his pinions, and under his wings you will find refuge’ (Psalms 91:3–4). Ezekiel refers allegorically to both King Nebuchadnezzar of Babylon (Ezekiel 17:26) and the Egyptian pharaoh Psammetichus II (Ezekiel 17:7) as eagles with colourful plumage and in one of the Hebrew bible’s most beautiful poetic passages, the dead king Saul and his son Jonathan were described in life as ‘swifter than eagles, . . . stronger than lions’ (2 Samuel 1:23). Birds of prey in Ugaritic epic are used metaphorically when describing the powerful weapons made by Kothar for Baal in his struggle against Yamm (‘the sea’). The weapons are instructed by Kothar: ‘May you leap from Baal’s hand, like an eagle from his fingers.’

4. The habits of the eagle

Aristotle Historia Animalium 619a 14–b12, 620a 5–12

Eagles hunt and fly in the second half of the day, from lunchtime to evening; in the early morning they are inactive until midday. As an eagle ages the upper part of its bill continues to grow and becomes ever more hooked, until ultimately it [is unable to eat and] starves to death. . . . If they have surplus prey they keep it on one side for their chicks, because they cannot rely on being able to catch prey every day and sometimes return from the hunt with nothing. If they find anyone trying to approach their nest they will strike him with their wings and tear him with their talons. Eagles do not build their nests in open country, but on higher ground, particularly among rocky crags and also in treetops. They feed their chicks until they fledge, and at that point drive them from the nest, and indeed from their territory altogether. A single pair of eagles needs a very large territory, and so they will not allow others to live near them.

Eagles do not hunt in the vicinity of their nest, but at a considerable distance from it. When an eagle has caught and carried off its prey, it sets it down and does not immediately fly away with it; it weighs it, and if it seems too heavy, leaves it behind. Nor does an eagle seize a hare as soon as it sees it, but allows the hare to come down into the open. Eagles do not swoop down directly to the ground, but descend gradually in decreasing circles: both these behaviours are for protection, to avoid being trapped. Eagles sit up on the heights because they are slow to rise from the ground, and they fly high so as to have the widest possible vista. . . . Eagles hunt hares, fawns, foxes and any other animal which they can kill. They are long-lived, as is demonstrated by the fact that eagles’ nests remain in the same place over a long time.

The *haliaetos* spends its days out at sea, and lives by hunting seabirds, as I said above. It hunts birds when it finds them alone, waiting for the moment when the bird comes

back up from under the water: the bird sees the *haliaëtos* as it emerges, and plunges back down in fright, so that it can surface in a different spot. But the *haliaëtos*, with its sharp eyesight, remains patrolling above until its prey either runs out of air or can be caught above the water. It does not attack birds in flocks, because they can scare it away by splashing it with their wings.

COMMENT: Aristotle's account of eagles' habits is generally accurate, and appears to refer most clearly to the Golden Eagle (*Aquila chrysaetos*), which seems to have been the archetypal eagle for the Greeks (Arnott 2007: 3). Immediately before this passage he attempts to define six types of *aëtos*, but his divisions are not very helpful to modern eyes, as his primary mode of distinction is by type of prey – he names the *nebrophonos* (fawn-killer), *nēttophonos* (duck-killer) and *lagōphonos* (hare-killer), which are impossible to relate to modern species – and also includes multiple names apparently reflecting local dialect terms. The only modern species clearly identifiable from his account is the *haliaëtos* (lit. sea-eagle), which is the White-Tailed or Sea Eagle (*Haliaetus albicilla*), and he gives a vivid description of its method of hunting birds at sea. Pliny takes over much of the Aristotelian material, with some interpolations of his own, for example on the magical eagle-stone found in the eagle's nest; he gives a similar description of the *haliaëtos*, although he says that it hunts fish, not birds, at sea, and also of the *morphnos* which hunts ducks in the marshes (NH X.6–14).

Eagles' hunting habits are in general far better reported than their breeding, as ancient authors were subject to a number of odd preconceptions about the 'pure blood' of the eagle, premised on the idea that it was the ideal of raptors and that other kinds were produced from it by crossbreeding; this in turn led to beliefs that rejected eagle chicks were raised by other birds, principally the vulture or kite (Normand 2015: 246–9).

5. Hunting eagles

*Caeretan hydria, Paris Louvre E698, c. 540 BCE, attr.
Eagle Painter (detail: drawing by Tessa Rickards)*



COMMENT: Caeretan hydriai were produced by a short-lived workshop of East Greek painters working in Italy; two painters have been identified, one of whom was named 'The Eagle Painter' from his (or her) repeated representations of hunting or sitting eagles (Hemelrijk 1984). On this example an eagle swoops down to catch a hare on either side of the hydria's handle; the figures are large and colourful, but the scene is not the fruit of keen observation of nature. While the eagle's crooked beak and talons are well depicted, a fundamental error has been made over the mode of hunting: an eagle strikes its prey and seizes it with its talons, not its beak. Similarly, the eagle's feathers are coloured in red and white bands which do not reproduce its actual plumage, but simply serve to create a dramatic effect. Other Caeretan hydriai depict eagles sitting (Basel Antikenmueum), or in the act of swooping on a hare (Louvre E701, Dunedin, Otago Museum E.53.61); one repeats the scene with a deer as prey (Louvre E700). Again the deer is far too large to be credible as prey: it is perfectly possible for a Golden Eagle to take a young fawn or kid of a wild goat, but larger animals are too strong. This did not, however, prevent some far-fetched stories being told of eagles hunting fully grown bulls by driving them over precipices (Ael. *NA* II.39), or stags which they blind by throwing dust into their eyes (Plin. *NH* X.17). The representations suggest that eagles' actual hunting behaviour was rarely observed, and it was depicted on the hydriai because it was the largest and most impressive of predators, alongside hunting lions and leopards.

6. Prophetic eagles and Roman rulers

a) *Plutarch Life of Marius 36.5–6*

While he was still very young and living in the country, Marius caught in his cloak an eagle's nest which had fallen, and the nest had seven eagle chicks in it. His parents were astonished at the sight and consulted the augurs, who interpreted it as a sign that Marius was fated to become the most distinguished of men, and would hold the highest command and power seven times. Some believe that this really happened to Marius; others say that the people who heard him tell the story during the period of his flight recorded it as true, even though it was an invention. Eagles, as we know, do not lay more than two eggs, and even Musaeus was wrong in what he said about eagles, namely, 'Three eggs it lays, two it hatches and one chick it raises.'

b) *Livy I.34*

[Lucumo and Tanaquil] therefore packed up their belongings and moved to Rome. As they reached the Janiculan Hill, Lucumo was sitting on their cart with his wife at his side, when an eagle flew calmly down from on high and snatched up his cap; it flew around the cart uttering loud cries, then, as though sent as the instrument of a god, placed the cap neatly back on his head and soared back up to the heights. Tanaquil, we are told, joyfully accepted this as an omen, for as an Etruscan she was skilled in the interpretation of divine prodigies.

c) *Suetonius Tiberius 14*

Indeed, a few days before Tiberius was recalled [to Rome] an eagle, a bird not previously seen in Rhodes, perched on the roof of his house.

d) Suetonius Vespasian 5.7

At the battle of Bedriacum, before the armies engaged, two eagles appeared in the sight of all, fighting each other; when one defeated the other, a third eagle flew up from the east and drove off the victor.

COMMENT: The number of stories in the Roman tradition about leaders whose future greatness was revealed by an omen involving an eagle is quite remarkable. To an extent this arises from competitive omen-creation, as each ruler sought to generate a similar story to cement his or her claim to rule, but it also indicates the significance of the eagle in the Roman mind. This type of eagle story can easily be paralleled from earlier cultures: Aelian reported, for instance, that the founding-father of the Achaemenid dynasty of Iran had been fostered and raised by an eagle (NA XII.21), a notion which may have had a genuine Persian tradition behind it (Normand 2015: 264 and n. 259).

Probably the most striking aspect of the multiple eagle omens is their generally unrealistic nature. Eagles are shy birds which inhabit remote and mountainous regions: they do not regularly visit towns or interact with humans. Yet the omens require them not only to be seen in cities, but to engage directly with people, snatching bread from their hands or perching on their shoulder (Suet. *Aug.* 94.7; *Claud.* 7.1). It is plain from some of the accounts that authors were aware of this lack of realism and hence somewhat uneasy about their material: the tale of Marius' seven eaglets obviously troubled Plutarch, who realised its imaginary nature (though this did not prevent the story being recycled for Clodius Albinus in the *Historia Augusta* (5.8)), and even Tiberius' omen concedes the rarity of seeing an eagle in Rhodes. Only Vespasian's omen, of the eagles fighting above the battlefield of Bedriacum, seems remotely plausible in behavioural terms. The repeated omens are, furthermore, restricted to this one area, the indication of future greatness: in the lists of annual prodigies in Italy noted by Livy an eagle appears only once, and that in a military camp outside Rome (Obs. 69; Rasmussen 2003). If one wanted to find a real-world explanation for the individual stories, one would have to assume that many different smaller raptors were being identified as eagles, but it is better to understand them as demonstrating the power of wishful thinking and invention, the idea of the eagle having become completely detached from any sense of the actual bird (in just the same way as the wolf: see WOLF no. 11).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
J.M. Aynard, 'Animals in Mesopotamia', in A. Houghton Brodrick (ed.), *Animals in Archaeology* (London 1972), 42–68.
M. Cocker, *Birds and People* (London 2013).
B.J. Collins, *The Representation of Animals in Hittite Texts*, PhD Diss. (New Haven 1989).
T.A. Forti, *Animal Imagery in the Book of Proverbs* (Leiden 2008).
B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 1996).
J.M. Hemelrijk, *Caeretan Hydriae (Kerameus 5)* (Mainz 1984).
H.A. Hoffner Jr., *Hittite Myths* (Atlanta 1998).
H. Normand, *Les rapaces dans les mondes grec et romain: categorisation, representations culturelles et pratiques* (Bordeaux 2015).
S.W. Rasmussen, *Public Portents in Republican Rome* (Rome 2003).
J. Rogers, *Eagle* (London 2015).
M. Schmidt, 'Adler und Schlange. Ein griechisches Bildzeichen für die Dimension der Zukunft', *Boreas* 6 (1983), 61–71.

VULTURE

Vultures are amongst the earliest living creatures recorded in human art: images of the bird were carved into T-shaped pillars at Göbekli Tepe, a vast Neolithic sanctuary complex in south-east Turkey dating to around 9000 BCE. From evidence gathered at the site, it would appear that the vulture was the most prominent bird in Neolithic cult practice, symbolising astral flight and the transmigration of the soul in death, although it has been suggested that the vultures depicted at Göbekli Tepe and other Neolithic sites in Turkey and northern Syria may not be vultures *per se*, but shamanic ‘birdmen’ in ritual costume who dominated the most important cult involving the excarnation of the dead by vultures (Hodder 2010). Whatever the reality, there is no denying the importance of the vulture in the formative human ritual experience.

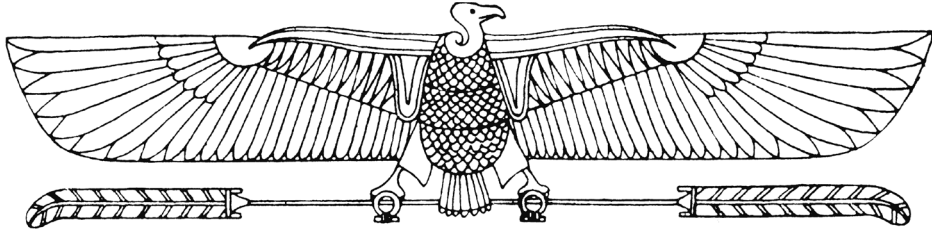
At least five species of vulture were encountered across the Mediterranean and the Near East in antiquity: the lappet-faced vulture (*Torgos tracheliotus*), the black vulture (*Aegypius monachus*), the Egyptian vulture (*Neophron percnopterus*, also known as ‘pharaoh’s chicken’), the griffon vulture (*Gyps fulvus*) and the bearded vulture or lammergeier (*Gypaetus barbatus*). All but the first were seen in Greece and Italy too, though the black vulture was rare, but Greek and Roman writers tend to use the broad terms – *gyps* in Greek, *vultur* in Latin – indiscriminately, given the difficulty of clear identification. Even Aristotle describes only two kinds of *gypts*, a paler and a darker, though he also knew a bird, which he called the *phēnē*, that seems to combine the characteristics of the black vulture and the lammergeier (*HA* 592b 5–8; see Arnott 2007: 60–1, 188).

All vultures are scavengers and in ancient societies they profited from human society’s warfare, lack of medical care and consequent early mortality rate. Vultures were usually encountered in rural and desert areas, but sometimes hunger led them into urban centres. Most ancient societies feared and reviled vultures, although, perhaps surprisingly, these powerful birds of prey could also be revered and admired: the Egyptians regarded vultures very positively (see below; Shonkwiler 2012) and in ancient Persia, as part of early Zoroastrian belief, the bodies of the dead were laid out on mountain tops or on specially created towers so that their flesh could be eaten by vultures which thereby performed an important ritual and sanitary service (van Dooren 2011: 9–12).

More commonly, however, vultures fed on the carcasses of animals that killed one another, ate putrid fish, followed caravans across the desert and were ready to snatch at offal thrown from animals dressed for feasting. They flocked over altars for the entrails from sacrifice, and devoured scraps cast aside by tent-dwellers and residents of cities. Although vultures do not attack live prey their habit of waiting near dying creatures is noted, and they appear in mythology as an instrument of eternal torture for Tityos (Hom. *Od.* XI.576–81) who had two vultures set to eat his liver in the Underworld. On account of their steady diet of carrion, vultures were never sought as food; among the Hebrews, the vulture was placed among the abominations which were deemed uneatable (Leviticus 11:18; Deuteronomy 14:13). Oddly, in later Christian symbolism the vulture came to be associated with the Virgin Mary, because of the story (no. 5 below) that female vultures reproduced asexually (Grant 1999: 193 n. 271).

1. The protective and nurturing vulture

Lintel decoration, Medinet Habu mortuary temple, Thebes, XX Dynasty



COMMENT: Among birds of prey, the lappet-faced vulture (*Torgos tracheliotus*) was the most commonly depicted in Egyptian art (Houlihan 1986: 41–3). With a wingspan of three metres, it is one of Africa's largest birds. As well as being an aggressive and powerful raptor which hunts small birds and mammals, it dominates and displaces all other avian scavengers that gather around carrion. Its razor-sharp hooked beak is even capable of tearing the flesh off the carcasses of elephants and rhinoceroses. This representation of the bird is well observed; its primary and secondary feathers are rendered accurately, as if seen from below during flight. Its claws clutch the *shen*-sign, the hieroglyph for 'eternity', thereby giving this otherwise realistic image of the vulture an obvious symbolic quality (Lacovara 1990: 23; Vernus and Yoyotte 2005: 418–27).

In Egypt, the commonly used vulture hieroglyph was the uniliteral sign used for the glottal sound *aleph* as well as for words such as 'mother', 'grandmother', 'prosperous' and 'ruler'. The bird was closely associated with the pharaoh, possibly because the vulture was the symbol of one of Egypt's oldest deities, the Upper Egyptian goddess Nekhbet, the guardian of the pharaoh and, by extension, royalty generally. She was often depicted with extended wings, as here in this piece of funerary jewellery, so that the goddess seemed to wrap her wings around the royal deceased. The Egyptians called the vulture goddess the 'Mother of Mothers, who has Existed from the Beginning and Creator of the World' and the crafted head of the bird was often placed on the front of the pharaoh's crown, alongside the figure of Wadjet (the goddess of Lower Egypt) who was represented by the cobra (Nekhbet might also be shown with a serpent head, thereby forming a syncretistic form of Nekhbet and Wadjet). The regalia of royal women also incorporated the vulture, where the body of the bird formed a cap of a royal crown and the wings hung down the sides of the face. Topped with a modius and sun disk and falcon plumes, the vulture crown was also worn by goddesses and must therefore have alluded to the queen's divinity.

The goddess Mut, the supreme mother-deity of the New Kingdom Egyptian pantheon, was also represented by a vulture (*mw.t* was, in fact, the Egyptian word for both 'vulture' and 'mother'). In fact, the exemplary nurturing behaviour of vultures, which were thought of as being devoted towards rearing their young, led the Egyptians to view them as model parents, and their lack of sexual dimorphism led to the mistaken idea that all vultures were female and reproduced through parthenogenesis. This idea produced some Late-Period popular morality tales, chief amongst them the story of *The Cat and the Vulture* (Leiden Demotic Papyrus I, 384; Griffiths 1967: 94). In the tale, a cat and a vulture, two obviously natural enemies, make a non-aggression pact in the name of the god Pre in order to protect their young offspring. However, a vulture-fledgling falls from the nest, attempts to steal food from the cat's kittens and is badly wounded by the angry kittens as they retaliate. The mother vulture takes her revenge, killing all the kittens and feeding them to her fledglings.irate that the vulture has broken her oath, the god Pre allows a spark from a piece

of roasting meat (which the mother vulture has brought to feed her chicks) to burn the nest and kill her babies. The moral of the story is that parents, even good ones like vultures, cannot be held responsible for the actions of their children.

2. Vultures in Egyptian thought

Horapollo, Hieroglyphica 1.11

To denote a mother, or vision, or boundary, or foreknowledge, or a year, or heaven, or one that is compassionate, or Athena (Neith), or Hera (Isis), or two drachmas, [the Egyptians] draw [a vulture], because in this race of creatures there is no male. But they are born in this manner: when the vulture longs for conception, she opens her vagina to the North Wind, and is mounted by him for five days, during which time she partakes neither of food nor drink, being intent upon procreation. There are also other kinds of birds which conceive by the wind, but their eggs are of use only for food, and not for procreation; but the eggs of the vultures that are impregnated by the wind possess a vital principle. The vulture is used also as a symbol of vision, because it sees more keenly than all other creatures, and by looking towards the west when the sun is in the east, and towards the east when the god is in the west, it procures its necessary food from afar. And it signifies a boundary [landmark?] because, when a battle is to be fought, it points out the spot on which it will take place, by taking itself there seven days beforehand. And (it represents) foreknowledge, both from the circumstance last mentioned, and because it looks towards that army which is about to have the greater number killed, and be defeated, reckoning on its food from their slain, and on this account the ancient kings were accustomed to send forth observers to ascertain towards which part of the battle the vultures were looking, to apprise which army was to be overcome. And it symbolizes a year, because the 365 days of the year in which the annual period is completed are exactly apportioned by the habits of this creature, for it remains pregnant 120 days, and during an equal number it brings up its young, and during the remaining 120 it gives its attention to itself, neither conceiving nor bringing up its young, but preparing itself for another conception. And the remaining five days of the year, as I have said before, it devotes to another impregnation by the wind. It symbolises also a compassionate person, which appears to some to be the furthest from its nature, inasmuch as it is a creature that preys upon all things; but they were induced to use it as a symbol for this, because in the 120 days, during which it brings up its offspring, it flies to no great distance, but is solely engaged about its young and their sustenance; and if during this period it should be without food to give its young, it opens its own thigh, and suffers its offspring to partake of the blood, that they may not perish from starvation. And [it represents] Athena and Hera because among the Egyptians Athena is regarded as presiding over the upper hemisphere, and Hera over the lower . . . And the race of vultures, as I said before, is a race of females alone, and on this account the Egyptians over any female hieroglyph place the vulture as a mark of royalty and hence, not to prolong my discourse by mentioning each individually, when the Egyptians would designate any goddess who is a mother, they delineate a vulture, for it is the mother of a female progeny. And they denote by it heaven . . . because its generation is from heaven [by the wind]. And [it represents] two drachmas, because among the Egyptians the unit [of money] is the two drachmas, and the unit is the origin of every number, therefore when they would denote two drachmas, they with good reason depict a vulture, inasmuch as like unity it seems to be mother and generation.

COMMENT: A wealth of vulture-themed folklore is contained in the *Hieroglyphics of Horapollo*, a fourth-century CE text written, in all probability, in Alexandria by a priest during the last phase of the operation of the Egyptian temples. The work purports to be an explanation of a wide range of Egyptian hieroglyphs and is a mix of much (seemingly) authentic ancient pharaonic material with often inaccurate natural history. Originally written in (Demotic) Egyptian, the text was translated around 600 CE into Greek, was rediscovered in 1422 and first put into print in 1505.

Horapollo has much to say on vultures, some of which derives from Egyptian folklore and the rest from Greek studies in natural history. The belief that vultures existed only in female form, for instance, can be found in the works of Plutarch and Aelian (below) as well as in a demotic papyrus of the second century CE: 'I am the noble vulture of the male brother, the lord of Thebes, the noble vulture of which no male exists' (te Velde 2008: 244). While there are subtle differences in the male and female species of vulture, the sexes do appear to be very similar, and even the priests responsible for mummifying vultures may have thought the birds to be single-sex (Winter and Winter 1995: 61).

Most interesting is the Egyptian disassociation of the vulture from death. The vulture is never connected with the eating of dead flesh and one has to look hard for any negative aspect in its depiction (te Velde 2008: 243). Instead, as Horapollo stresses here, the procreative and nurturing aspects of the vulture are highlighted for praise. The vulture's gestation period of 120 days, plus the 120 days during which the mother looks after her young, and the final 120 days in which she gathers her strength for her next conception add up to, and give shape to, the days of the year. In short, the Egyptians never regarded the vulture as a symbol of death, but as one of compassion. In this context, the notion of a mother's milk was transformed into mother's blood, and the vulture is said to sacrifice her blood to feed her chicks. Of course, this is not really the case, but here the Egyptians might have observed the vultures' practice of regurgitating food for their young to swallow. A similar theme is observed in the Hebrew bible, although the Israelites seem to have been more in tune with the bird's true scavenging nature: 'Her young ones suck up blood; and where the slain are, there she is' (Job 39: 30). Van Dooren (2011: 105) suggests that,

the association of vultures with protection and life-giving nourishment was not made in these cultures *in spite* of these birds' scavenging lifestyle, but at least in part precisely *because* of their intimate dealings with the dead, and their role in removing waste and decomposing flesh.

3. Kettle of vultures

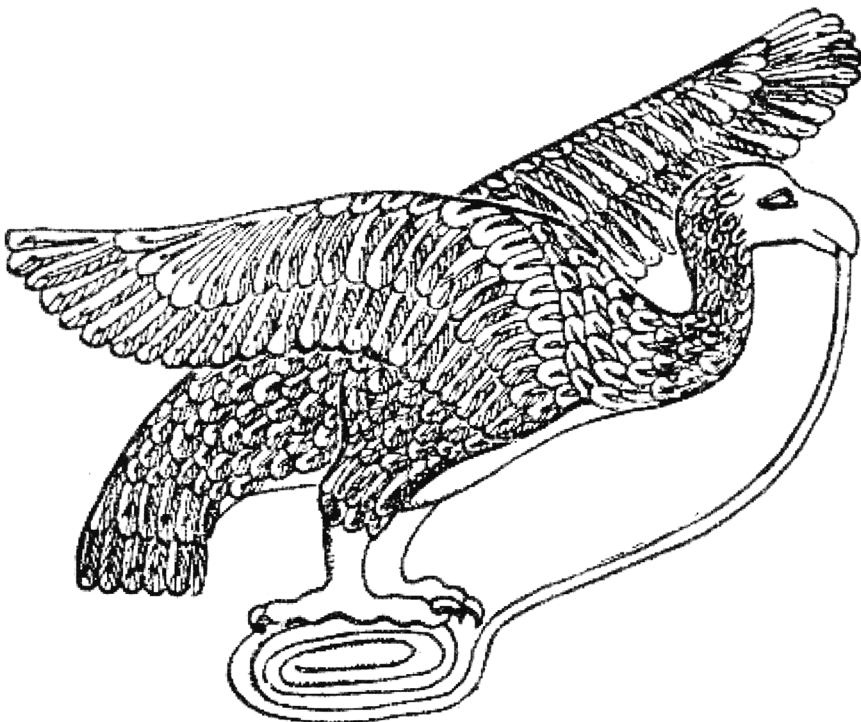
Detail of the Victory Stele of Sargon, c. 2450 BCE (Paris, Louvre AO 50)



COMMENT: The city-states of ancient Sumer were frequently at war, and this stele commemorates one such conflict. It is reminiscent of another erected by the victorious ruler Eannatum which also shows vultures scavenging at a battle site. Such stelai, covered with cuneiform inscriptions and iconographic representations of war and its aftermath, provide us with much information about warfare and the ideology of rulership in this early period. This is one of the earliest attestations of the vulture in Mesopotamian art, and the intention of the sculptor was clearly to represent the birds flying thick in the air overhead, bearing off from the field of battle the severed heads and limbs of the slain, which they hold firmly in their beaks and talons. Dogs have been added to the scene and they too are shown devouring human corpses. A vulture pecks at the eyes of a dead soldier, while another carries off a severed human foot; on the left, a vulture tugs at the entrails of an eviscerated corpse. This gore-fest is an instance of the new realism of Akkadian art during this early period of Mesopotamian history: the scene is graphic, gruesome and deliberately disturbing. The record of the royal victory is couched in metaphor: the king left the bones of his foes to be picked clean by the birds of prey. That the sculptor should have included this striking incident in his portrayal of the battle is further testimony to the magnitude of the slaughter which had taken place.

4. Battlefield scavenger

*Line-drawing detail of a Neo-Assyrian gypsum wall panel
relief from Nimrud, reign of Tiglath-Pileser III, c. 728 BCE
(London, British Museum 118907)*



COMMENT: In this wall panel relief a vulture flies across a battlefield, carrying entrails in its claws and beak. Throughout antiquity a clear connection was made between vultures and battlefields: Egyptian soldiers, for instance, were compared to birds of prey who would swoop upon their enemies: 'They [the troops] rushed to the [slaughter] like vultures, they attacked like panthers' (AEL III: 155; Teeter 2002: 268). In Hittite art vultures are shown in wall paintings diving for the flesh of headless corpses, apparently playing an integral role in the inhabitants' practice of excarnation. In Hittite ritual texts that relied on analogic magic, animals were useful as points of comparison; one such text reads, 'As the birds (and) vultures (alt. foxes) devour the life of this sheep, let the birds (and) vultures likewise devour the strength (of) the evil man, of his wives, his children, (and his) troops' (*KUB* 24.14 iv 19–25; Collins 2002: 322).

In the Hebrew bible the vulture is a symbol of both divine punishment and of divinely created desolation. In Proverbs (30:17) it is foretold that 'The eye that mocks a father, that scorns an aged mother, will be pecked out by the ravens of the valley, will be eaten by the vultures', while Isaiah's woeful prophecy concerning Israel's enemy, Edom, sees the land stripped of life so that it becomes a desert, 'a haunt for jackals, a home for owls . . . there also the vultures will gather, each with its mate' (Isaiah 34: 11–15). Throughout the Hebrew bible the figure of the vulture hovering above the battlefield looms large. To have one's body devoured by birds of prey was the ultimate horror and the curses which are recorded in Deuteronomy (28:26) warn that 'your carcass shall be meat for the birds of the air' (see further Parmelee 1960: 125–8, 145–6).

5. Classical views of the vulture

Aelian, On the Nature of Animals II.46

The vulture is the enemy of dead bodies: for it devours them, swooping down on them as on an enemy, and it stands guard over the dying. Vultures will even follow armies on campaign, knowing by some insight that they are marching to battle, and realising that all battles produce corpses.

They say that male vultures do not exist, and that all are female; and when female vultures fear being left without offspring, they do the following in order to conceive: they fly headfirst into the south wind. If no south wind is blowing, then they open their beaks to the east wind, and the wind's blast fertilises them, and they gestate for three years. And it is also said that vultures do not make nests. The *aigypios*, on the other hand, which is between the vulture and the eagle in type, is both male and female, and is dark in colour. I hear that these do build nests which can be seen. But I understand that vultures do not lay eggs, but bear live chicks which are feathered from birth, as I have heard.

COMMENT: Aelian's compendium of animals combines some recognisably accurate description of vultures waiting around the dying with some fanciful tales of their being impregnated by the wind and bearing live, feathered chicks. Such a combination demonstrates the ways in which vultures were familiar in antiquity – eating carrion and particularly noticeable in the aftermath of a battle – and the aspects of their lifecycle which were difficult to investigate, since they nest only in remote and inaccessible places, leading ancient writers to claim either that they were not native to Greece (Ar. *HA* 563a 6–10) or that they do not nest at all. The presence of vultures to eat the dead after battle is noted from Homer onward, and was one of the reasons for the importance attached to proper burial (see *DOG* nos 7 and 19): the ability of vultures to kettle round corpses comes not from any predictive powers – they undoubtedly followed armies for the everyday detritus which they offered – but because a soaring vulture can spot another diving for carrion

from several miles away, allowing them to gather quickly when opportunity arises. The *aigypios* described here seems to be the lammergeier (also known as *phēnē* in Greek), although Homer and Sophocles use the term for a bird which hunts live prey (Arnott 2007: 6–7). The lammergeier's habit of dropping bones on to rocks to break them open was well-known in antiquity, giving the bird its Latin name of *ossifraga* (Pliny *NH* X.11), and the notorious tale of the death of the poet Aeschylus, killed when a bird dropped a tortoise on his bald head, mistaking it for a rock (Ael. *NAV* VII.16), most probably relates to the lammergeier.

6. Tame vultures

Plutarch, Life of Marius 17.3

But the matter of the vultures, which Alexander of Myndos records is particularly striking. Two vultures were always seen above Marius' army on their successful campaigns, and kept company with them as they travelled, being recognisable by bronze collars around their necks. For the soldiers had once caught them, fixed the collars on them and then let them go again. Recognising the vultures in this way, Marius' soldiers welcomed them and took heart when they appeared to accompany their expeditions, as an omen of success.

COMMENT: The vulture may seem a highly inappropriate choice as an encouragement to one's army before battle, but it was in fact a bird rich in positive meaning for the Romans. The foundation of Rome itself was confirmed by the gods with an omen of vultures, Romulus seeing twelve vultures in the sky from his site on the Palatine Hill, trumping the six seen by his brother Remus (Livy I.7.1; Plut. *Rom.* 9.5). This omen retained its significance into historical times, with Octavian declaring a similar sighting of twelve vultures in 43 BCE while taking the auguries in his first consulship (Suet. *Aug.* 95; Green 2009: 149), and vultures in the city figure on three occasions among the portents collected by Livy (XXVII.11.4, 23.3; see Rasmussen 2003: 61, 68). The vultures soaring over Marius' army thus promised divine favour, even if stage-managed by the general himself, along with his Syrian soothsayer (*Mar.* 17.1–2).

That vultures should accompany an army on campaign is not unexpected – the camp and the presence of baggage animals would offer much opportunity for scavenging – but the staging of bird omens was not unknown in military contexts: Agathocles of Syracuse, for instance, is supposed to have released owls into his camp in Africa in 310 BCE in order to encourage his men by suggesting the support of Athena (Diod. XX.11.3–4).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
B.J. Collins, B.J. 'Animals in the religions of ancient Anatolia', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 309–34.
T. van Dooren, *Vulture* (London 2011).
R.M. Grant, *Early Christians and Animals* (London 1999).
S.J. Green, 'Malevolent gods and Promethean birds: contesting augury in Augustus' Rome', *TAPA* 139 (2009), 147–67.
J.G. Griffiths, 'Allegory in Greece and Egypt', *Journal of Egyptian Archaeology* 53 (1967), 79–102.
I. Hodder, *Religion in the Emergence of Civilization: Catalhöyük as a case study* (Cambridge 2010).
P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
P. Lacovara, 'An ancient Egyptian royal pectoral', *Journal of the Museum of Fine Arts, Boston* 2 (1990), 18–29.
A. Parmelee, *All the Birds of the Bible* (London 1960).

- J. Pollard, *Birds in Greek Life and Myth* (London 1977).
S.W. Rasmussen, *Public Portents in Republican Rome* (Rome 2003).
R. Shonkwiler, 'Sheltering wings: birds as symbols of protection in ancient Egypt', in R. Bailleul-LeSuer (ed.), *Between Heaven and Earth: birds in ancient Egypt* (Chicago 2012), 49–58.
E. Teeter, 'Animals in Egyptian literature' in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 251–70.
H. te Velde, 'The goddess Mut and the vulture', in S.H. D'Auria (ed.), *Servant of Mut: essays in honour of Richard A. Fazzini* (Leiden and Boston 2008), 242–5.
P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
E. Winter and U. Winter, 'The vulture in ancient Egypt: classical tradition and modern behaviourist research', *Bearded Vulture Reintroduction into the Alps: annual report* (Vienna 1995), 61–7.

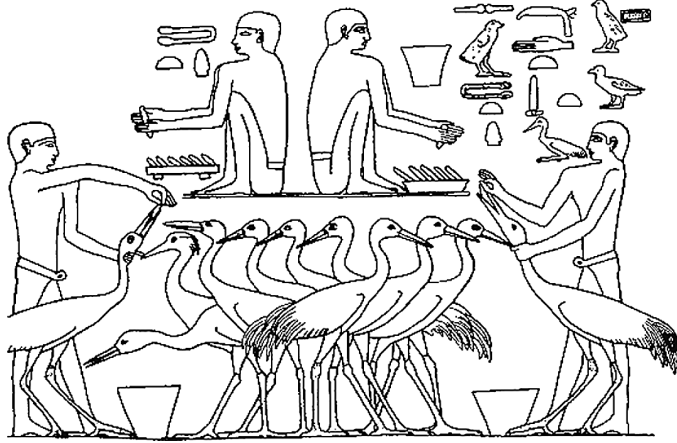
CRANE/STORK

Both crane and stork are large and unmistakable birds, and both are migratory across Europe and Africa, though their ranges today are considerably different from ancient times due to wetland habitat loss and modern farming methods. Of the fifteen species of crane which exist worldwide, only two inhabited the ancient Mediterranean and Near East, the Common crane (*Grus grus*) and smaller Demoiselle crane (*Anthropoides virgo*). Common cranes have large bodies with a distinctive 'bustle' of tail feathers and a striped head, while the demoiselle crane is more slender with distinctive white eye-tufts, but it is rare to find a clear distinction made between them in antiquity: Pliny is the only author to describe the *vipio* or small crane, as an inhabitant of the Balearic Islands (NH X.135, XI.122). Today cranes migrate along three primary routes, between Scandinavia and Spain, Poland and North Africa, and Russia and Ethiopia, but in antiquity their summer breeding zones were further south, in the Carpathian Basin and even northern Greece. That they bred in at least parts of Greece is indicated by Aristotle's knowledge of their courtship dances and nesting habits; he also correctly stated that they winter in the marshes of Upper Egypt where the Nile rises (HA 597a 4–6, 615b 16–19). Plato makes a single rather obscure reference to the existence of crane-farms in Thessaly (Pol. 264c), but it is not clear that cranes were ever domesticated for food in Greece, as they were in Egypt and Italy (see below).

Storks are also gregarious birds which arrived in spring to nest throughout Greece and Italy, and because they were happy to nest in tall buildings as well as trees (as they do today in Germany and Poland) were close companions of humans. Two species of stork, the White (*Ciconia ciconia*) and Black (*Ciconia nigra*) nest in Europe, and the Greek name *pelargos*, meaning 'black and white', was equally applicable to both (Arnott 2007: 168). The habits of storks were well understood, including their beak-clattering, returning to the same nest each year and their diet of lizards, toads and snakes (references collected by Arnott 2007: 169), but unlike the crane their wintering destination far to the south in tropical Africa remained mysterious (Ar. HA 600a 18–20; Plin. NH X.61). Because they ate snakes, storks were considered beneficial animals, and over time a series of more anthropomorphised beliefs developed about storks' concern and care for their parents; by the Roman period the stork had become a symbol of *pietas*, and was often depicted on coins in this role (Unte 1987).

1. Force-feeding domesticated cranes

Line drawing based on a wall-relief from the mastaba of Ti, Saqqara, V Dynasty (after Peters-Destéract 2005: 226)



COMMENT: Like geese and ducks, the Egyptians reared cranes for food. They are commonly depicted in poultry yard scenes where they are often seen being hand-fed. In Ti's scene, two men place food in the crane's beaks and appear to be holding the birds by their necks, although it is possible that they are massaging the birds' throats, forcing them to swallow – an indication perhaps of force-feeding and the creation of an Egyptian version of *foie gras* (see HYENA no. 2). Bedouin living in Egypt's Western Desert still eat cranes and regard them as a great delicacy.

It has been suggested that in antiquity domestic supplies of cranes must have been restocked every migration season as cranes do not breed well in captivity (Darby, Ghalioungui and Grivetti 1977: 291). Cranes were also suitable as food offerings to the gods, and Ramses III showed a particular penchant for gifting these birds to Amun at Thebes.

2. The migration of cranes

Hesiod, Works and Days 448–51

Take heed when you hear the voice of the crane calling from up in the clouds each year;
this is the sign of the ploughing season and the onset of rainy winter.

Aristotle Historia Animalium 614b 18–26

Cranes also seem to possess a considerable intelligence: they migrate over long distances, flying high so as to have a good view before them, and if they see clouds or storms, they settle to the ground and rest quietly. Then again, they have a leader, and birds which fly at the rear of the flock keep in contact with them by whistling cries. When they land to rest, most of them sleep with their head under a wing, standing first on one leg and then the other, but the leader keeps his head uncovered to stand watch, and if he notices any danger, gives the alarm by crying aloud.

Cicero, *De natura deorum* II.165

And who would not wonder at the abilities of cranes (as noted by Aristotle, who furnishes many such examples): when the cranes migrate across the sea, seeking warmer lands, they adopt a triangular formation; the sharp angle cuts through the air as they advance, while along each side as they slope away the cranes' wings carry them along like oars, and the base of the triangle which they form is helped along by the wind which blows from the rear.

COMMENT: The crane was a bird of passage in both Greece and Italy, migrating flocks passing over with characteristic noise and flight pattern. The migration of the crane was one of the most important indicators in Greece for the changes of the seasons – the autumn migration marked the beginning of winter and the end of the sailing season (Arat. 1075–81; Thphr. *Signs* 38), as the arrival of the swallow did the onset of spring (Ar. *Birds* 709–15). The collective and organised nature of the cranes' migration obviously impressed Aristotle, who includes cranes in his list of social animals, declaring that they acted with a common purpose under the guidance of a leader (*HA* 488a 8–13); his observation of their V-shaped flight formation, communicatory cries and understanding of the weather is very accurate (Morton 2001: 298–301). In the immediately following passage quoted by Cicero, however, Aristotle claimed erroneously that cranes flying in formation rest their heads on their companions during flight, and this, along with other fanciful ideas such as guardian cranes keeping watch with a stone clutched in one claw, was repeated and embroidered by later authors (Plut. *Mor.* 967c; Ael. *NA* III.13). Another set of stories grew up around the idea that cranes swallowed stones for ballast during their migration, something Aristotle explicitly refuted (Arist. *Birds* 1136–7, 1428–9; Ael. *NA* II.12; Ar *HA* 597a 32–b3); the idea that migrating animals needed to carry or swallow stones as ballast during their flight was surprisingly persistent: see QUAIL no. 4 and BEE.

3. Herons or cranes?

***Attic red-figure hydria, Harvard Fogg Museum 1960.340, c. 470 BCE,
attr. Painter of the Yale Oinochoe (drawing by Tessa Rickards)***



COMMENT: Athenian vase painters and gem engravers seem to indicate that stilt-birds were regularly kept as house pets in classical Athens, most often by women: long-legged birds appear as pets on numerous pots between 525 and 400 BCE, as well as on gems and sealstones (Siron 2015). The hydria above shows one of the most lively representations, depicting three young women feeding and interacting with two stilt-birds: the birds look up expectantly and one claps its wings. The identification of the birds, however, is difficult: the media in which they are depicted make colouring and detail hard to show, and we find significant variation in size and shape of bill, crest and feet. Traditionally, scholars have identified the birds as herons, but it is unlikely that herons would make successful domestic pets, as they are aquatic and carnivorous birds, not known for ready interaction with humans. As large birds they would also seem to be too messy to accommodate inside a house, and there are no comparable examples of pet herons from other periods of history. It seems more likely that, as Böhr suggests, these birds are meant to represent demoiselle cranes, the smallest of crane species, which feed on plants and small invertebrates and are easily accustomed to captivity – they are kept as pets in Pakistan today (Böhr 2002). While demoiselle cranes are not resident in Greece in modern times, they were probably more common in antiquity – Geometric period pots such as the Laconian hydria in the British Museum (B58; Pollard 1977: fig. 11) seem to illustrate demoiselle cranes as regular breeding visitors.

4. Trapping cranes

Dionysius On Birds III.11

The best way to catch cranes is this: take a dried gourd and hollow it out, fill it with birdlime, and then put a scarab beetle inside it, which will buzz as it tries to escape; the crane will be attracted by the buzzing and come running up, and will put its head into the gourd to take the beetle. The lime in the gourd will stick to its head, eyes and wings, rendering it unable to see or move, and it will stay there until the fowler comes to catch it. If no scarab can be found, the gourd can be baited with leaves of onions instead.

Cranes can also easily be snared: make holes on both sides of a cut rush and put thin straws in them, and attach a noose from both ends, then suspend a pierced stone from the rush, and in the middle of the rush fix an iron pin with a bean as bait. When the crane sees the bean it will put its head into the noose to take it, and once it has seized the bean and tries to retract its head, it will feel the noose around its neck and try to fly away (realising it has been trapped), but the weight of the stone will prevent it, so that the fowler can catch it.

COMMENT: Dionysius' *On Birds*, probably written in the first century CE, is in part a description of fowling techniques, and he includes two methods of trapping cranes. His first method seems rather impractical, but the second, hard though it is to reconstruct in detail, is supported by other evidence: Virgil (*Georg.* I.307) refers to winter as the season for snaring cranes, and Antipater in the *Greek Anthology* (VI.109) to neck-snares for cranes. Cranes were caught for a number of different purposes. The most obvious is for food and feathers: Varro mentions cranes among the birds kept in *vivaria* by Roman landowners (*DRR* III.2.14), and Pliny, in a catalogue of cruel farming practices, describes cranes blinded by sewing up their eyes so that they can fatten in darkness (*Mor.* 997e). Pliny (*NH* X.60) says that cranes had become fashionable for the table in his own time, though the recipe given by Apicius (VI.213) suggests that it was valued more for its visual impact as a dish than for its flavour. Bartosiewicz (2005: 266) emphasises the importance of crane feathers as decoration for clothing, drawing on comparative evidence from Hungary.

Other sources imply that cranes were considered a pest species because they ate grain and seeds, and were therefore snared as a deterrent: a fable in the Aesopic tradition relates the plight of a stork which was caught by mistake among a flock of cranes in a farmer's trap, and pleaded to be spared because it was not harmful to the crops (Perry 194). Pliny seems to imply, however, that cranes were also caught to be kept as pets – he says that when tamed they can be both playful and graceful – and this gains some support from comparative medieval evidence (Bartosiewicz 2005: 262–3). At the dedication of the Colosseum in 80 BCE cranes were presented in a *venatio* in Rome, the only occasion on which they are mentioned in such a context (Dio LXVI.25.1), though the description (a fight of cranes) is opaque – perhaps some kind of representation was presented of the mythological battle between cranes and pygmies?

5. Storks on their nest

***Roman silver repoussé cup from Boscoreale, Paris, Louvre BJ1905,
first century CE (drawing by Tessa Rickards)***



COMMENT: On this silver kantharos, one of a pair from the Boscoreale Treasure found near Pompeii in 1895, storks tend their chicks in their treetop nest, bringing insects and snakes to feed them; on the companion cup, a brooding stork chases away a marauding crab. The imagery is very much drawn from life as the birds interact with each other and their young, and it is tempting to link the scenes to the symbolism of family duty, but two other cups in the Boscoreale collection depict cranes in a similar natural landscape, apparently without any symbolic meaning, suggesting that the observation of nature was uppermost.

Storks were held in considerable affection by the Greeks and Romans, partly because they were seen as effective against snakes, but also because they are more friendly to humans than most wild birds. As they readily nest in human settlements and return to the same nest site each year,

stories grew up about the bonds formed between storks and humans, usually turning on the idea of the injured stork that was rescued and nursed back to health, and subsequently returned to reward the human in some way (Dionys. *On Birds* I.31; Ael. *NA* VIII.22).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 L. Bartosiewicz, 'Crane: food, pet and symbol', in G. Grupe and J. Peters (eds), *Feathers, Grit and Symbolism: birds and humans in the ancient old and new worlds* (Rahden 2005), 259–69.
 E. Böhr, 'Mit Schopf am Brust und Kopf: der Jungfernkranich', in A.J. Clark and J. Gaunt (eds), *Essays in Honour of Dietrich van Bothmer* (Amsterdam 2002), 37–47.
 W.J. Darby, P. Ghalioungui and L. Grivetti, *Food: the Gift of Osiris* (2 vols) (London 1977).
 F. Dunand and R. Lichtenberg, *Des animaux et des hommes. Une symbiose égyptienne* (Paris 2005).
 J. Morton, *The Role of the Physical Environment in Ancient Greek Seafaring* (Leiden 2001).
 M. Peters-Destéract, *Pain, bière et toutes bonnes chose. L'alimentation dans l'Égypte ancienne* (Paris 2005).
 J. Pollard, *Birds in Greek Life and Myth* (London 1977).
 N. Siron, 'La jeune fille au héron. Genre et érotique dans l'iconographie grecque (VIe–IVe siècle avant J.-C.)', *Clio* 42 (2015), 217–42.
 D.E. Strong, *Greek and Roman Gold and Silver Plate* (London 1966).
 W. Unte, 'Die fromme Vogel: zum bild des Storchs in der Antike', *Naturwissenschaftliche Rundschau* 40 (1987), 10–13.

SWAN

Unmistakeable in its graceful silhouette, the swan is the largest member of the family *Anatidae*, and is among the largest of the world's flying birds, with a wingspan of up to three metres. Swans are primarily water birds, but also feed on land; notoriously, they form lifelong monogamous pairs. Swans have played a significant cultural role in history, although in Egypt and the Near East they never reached the significance they gained in the Classical world and in subsequent Western cultures (Young 2008). Nevertheless, Near Eastern artists responded to the swan's natural beauty as well as its strength and occasional ferocity; the bird's grace is captured in wall paintings, stone reliefs and precious objects (such as seals; see Asher-Greve 2013: 373, fig. 18.7) throughout pre-Classical antiquity, although the swan failed to match the symbolic importance of the goose or even the duck.

The prominence of the swan in classical mythology – Leda and the Swan, the metamorphosis of Kyknos, Apollo's singing swans – would lead one to expect that it was widely kept and studied in antiquity, but in fact the opposite is true: swans may have played a significant role in ancient symbolism and myth, but in reality their place was very small among wild and domesticated animals. Two species of swan, the Whooper (*Cygnus cygnus*) and the Mute (*Cygnus olor*), were known to the Greeks and Romans as creatures of wild waterside places (Greek *kyknos*, Latin *cygnus*), although the two were not clearly distinguished. They were not kept as ornamental birds, even in Roman *vivaria*, and their habits remained rather obscure. Perhaps the most striking illustration of this is that swans in art are very rarely shown swimming, which we might consider their most characteristic appearance: they are almost always depicted either in flight or on dry land.

Artistic representations of swans are numerous, most depicting them as companion or representative of the gods: the swan's link with Apollo is demonstrated by Aelian's story (*NA* XI.1) about the Hyperborean swans which take part in worship at Apollo's temple, as well as references to the swans at Delos (Eur. *IT* 1103–5); according to Bevan (1989), however, dedications of votive

offerings in the shape of swans were more common for female deities such as Leto and Artemis than for Apollo. In Roman art the swan appears both as a symbol of Apollo (e.g. on the Ara Pacis) and in funerary art representing a happy death (Toynbee 2013: 260; see no. 2 below).

There are one or two references to the eating of swans as luxury food (Athen. 393d; Plut. *Mor.* 997a; Anaxandr. 42.65), but these all make plain that it was not a regular practice.

1. Decoy swans

Hittite Law §119, cuneiform tablet from Hattusa, c. 1650–1100 BCE (after Hoffner 1997: 110)

If anyone [steals] a swan . . . trained (as a decoy) [or] a partridge trained (as a decoy), [formerly] they paid [1] mina (= 40 shekels of silver), but now [he shall pay] 12 shekels (of silver), and he shall look [to his house for it].

COMMENT: Representations of swans in the Near East are scarce (although in art they are easily confused with geese and other water fowl). An early Sumerian image shows a seated goddess placing her feet on the back of a swimming swan (British Museum 127484), perhaps an early association between the swan and fertility goddesses. The image of the swimming swan is, remarkably, very rare in ancient art; swans are more often depicted on land, usually in aggressive or display modes.

Likewise, swans make only occasional appearances in Near Eastern texts; they are completely absent from the Hebrew bible. This fleeting reference, found among the many Hittite Laws, suggests that swans must have been a common enough sight in Anatolia. The law stipulates that anyone caught stealing a decoy swan – that is to say, a tame domesticated bird used by hunters to attract wildfowl – will be subject to a hefty fine which will be collected by agents of the state. Decoys, both living and inanimate, were frequently used in hunting throughout Egypt and the Near East.

2. King Seti's swans

Nauri decree of Seti I, XIX Dynasty, c. 1290 BCE from Nubia (after Griffith 1927 and Edgerton 1947)

The lake is in front of [the temple], it is like the Great Green (sea) whose circuit is not known, when one gazes upon it bright like the colour of lapis-lazuli; its middle parts of papyrus and reeds and lilies abounding each day . . . His temple is looked upon as the marshes of Akhbit according to the squawking of the water birds, the geese, and all the birds of the watery region. The swans [*akhy*-birds] breed for him in his domain.

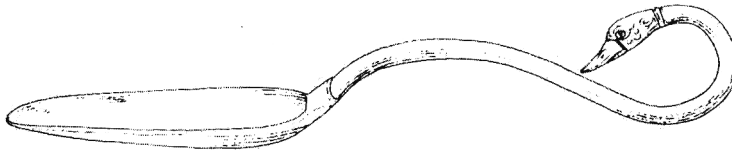
COMMENT: Erected in regnal year 4 of Seti I, the Nauri decree is concerned with various economic interests of a temple which the pharaoh erected in Nubia, including temple fields, workforce and animals. A lively and elegant picture of the temple environment is depicted in the decree, including this description of the temple's sacred lake which, with its papyrus thicket and water lilies, is the ideal setting for water fowl, including swans who are contented enough to nest, mate and multiply.

Two Egyptian words were used for 'swan', *djen-djen* and *akhy*, although it is not possible to know which species of swan is being referred to at any time. The mute swan (*Cygnus olor*) was

certainly known in Egypt and several life-size wooden images of the bird have been found in royal tombs, including the XII Dynasty tomb of Princess Itweret at Dashur and the XVIII tomb of the pharaoh Horemheb at Thebes, suggesting that the swan, like the goose, had some kind of symbolic significance, although the swan never enjoyed the goose's high status as a religious symbol (Houlihan 1986: 50–1; Houlihan 1996: 142; Davis 1912: plate 77). Egyptians also knew the Whooper swan (*Cygnus cygnus*) and Bewick's swan (*Cygnus bewickii*); both are carved in relief and are represented in wall paintings (Héry and Enel 1993: 53, pl. 72). One scene showing the domestic aviary of the nobleman Ptahhotep II shows swans in the company of geese and ducks and an accompanying inscription credits Ptahhotep with owning 1,225 swans. This high number suggests that swans were bred for food, and in the tomb of Kagemni a man is actually shown force-feeding a swan to fatten it for the table, although swans otherwise appear very infrequently in scenes showing poultry made ready for the table (Houlihan 1986: 53).

3. Silver swan

Achaemenid Persian silver spoon from Parsagade, c. 450–400 BCE
(line drawing after Stronach 1978: 202, pls. 150–1)



COMMENT: Found in a clay jar at Parsagade, the first Achaemenid capital, amid a great hoard of silver, this spoon is a fine display of Persian craftsmanship (for a photograph from a different angle see Dandamaev and Lukonin 1989: 271, fig. 38b). The slightly concave flat spoon tapers and rises in the form of a looped handle which terminates in the head of a mute swan whose beak almost touches the handle of the spoon. The spoon is hammered from a single piece of silver, and the swan's beak, eyes and plumage are rendered in great detail by chasing and engraving. A similar silver spoon comes from Achaemenid-period Lydia, while a variation in ivory has been found at Patras (Zimi 1997: 213, 216). The bowl of the spoon forms the swan's body and the use of the curve of the swan's neck (looking backward) to create the handle is a masterful use of natural imagery. This is one of a number of swans depicted in Persian art. One particularly successful image is found on a gemstone-seal and shows a swan, with its distinctive curved neck, rearing up and flapping its powerful wings as if in aggressive display (Boardman 1970: pl. 963).

4. Swans on Greek pottery

Attic black-figure cup, New York Metropolitan Museum of Art 1972.118.144, c.530 BCE (Bequest of Walter C. Baker, 1971). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: This cup carries as decoration on either side a single bird, identified as a swan (although it is not white) by its characteristic form. Swans standing with spread wings like this are a common element of the sixth-century 'animal frieze' style, drawn from near Eastern models via Corinth (Amyx 1988: 2.669–70). At this period white paint was rarely used, and swans are usually shown, as here, with bands and patterns to denote the texture of their feathers: only in fifth- and fourth-century pottery do they come to be painted in white.

Swans in fact appear in all periods of Greek vase-painting: in Geometric art of the eighth century BCE water-birds are a very frequent motif, often in repeating bands, and swans are also shown as attributes of Artemis in her role as *Potnia Theron*, Mistress of the Beasts (see *LIMC* II 624–9). In classical vase-painting they appear as companions of the gods – Apollo, Aphrodite and Eros are all depicted riding on swans (*LIMC* II. 96–8, 227–8, III.870–1), and a very famous white-ground lekythos in St Petersburg depicts Artemis feeding a very lifelike swan (beautifully reproduced in Reeder 1995: no. 90). Swans also sometimes appear with women in domestic scenes, though these must be symbolic in meaning as there is no indication that swans were kept as pets in Greek homes: perhaps some may be misidentified geese (Lewis 2002: 161–6). The popularity of the swan as a decorative motif is undoubtedly a consequence of its size and striking appearance, and its relative unfamiliarity.

5. Swans and their song

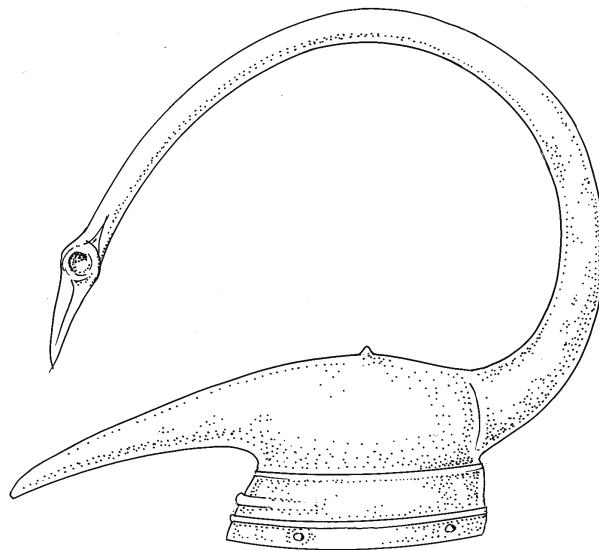
Aristotle Historia Animalium 615a32–b5

Swans are also among the web-footed birds: they live around lakes and marshes, where they find their food easily, and are noble in character, affectionate towards their offspring and long-lived; when attacked by the eagle they defend themselves successfully, but they do not attack unprovoked. They are musical birds and sing most sweetly when they are about to die. For they fly out to sea, and sailors voyaging along the Libyan coast have encountered many of them in the open sea, singing in haunting voices, and have then seen that some of them died.

COMMENT: Discussion of the habits of the swan is very limited in classical sources, suggesting that they were rarely observed: Aristotle's comments tend to be repeated by later writers (e.g. Ael. *NA* X.36), along with the claim that swans are cannibalistic, which is untrue. The one idea that intrigued ancient writers, however, was the 'swansong': it is first referred to by Aeschylus (*Ag.* 1444–6), and is extensively embroidered by subsequent writers; both Athenaeus (393d–e) and Pliny (*NH* X.63) ridicule the idea, but that did not prevent its passing into medieval – and modern – folklore. It has been widely discussed by modern scholars keen to find a basis in reality for the tale – suggestions include the misidentification of species or a 'wailing death rattle' (Arnott 1977) – but the nature of the story indicates that it is fantasy: one would have to assume that the swan 'knows' that it is about to die, and that the observer (as Aristotle's story realises) just happens to be present as the bird dies of natural causes. Because of the strong link between the prophetic Apollo and the swan as his sacred bird, however, these were assumptions that ancient writers were happy to make (Plato *Phaedo* 84e–85a).

6. The swans of war

Gallic bronze helmet in the form of a swan (drawing by Tessa Rickards)



COMMENT: This unique helmet was found in 2004 at the Gallic sanctuary of Tintignac in central France, part of a ritual deposit of ornate military equipment including weapons, helmets and *carnyxes*, war-trumpets. Tintignac was a Gallic religious site which was rebuilt after the Roman conquest; the deposit dates from the second or first century BCE, perhaps an offering to Teutates, the Gallic god whom the Romans identified with Mars. Made of bronze, the body of the swan forms a cap and the delicately moulded neck curves back over the wearer's head. While the Gallic warriors whom the Romans encountered were well known for their fanciful animal-form helmets (Diod. V.30) the delicacy of this example and its discovery in a sanctuary led Maniquet (2010) to suggest that it was a ritual item rather than a practical one.

The link between the swan and warfare may not seem obvious to the modern mind, but swans can be fierce and belligerent, especially when nesting (Athen. *Deipn.* 393d); there are occasional references to warriors wearing crests of swans' feathers in battle (Virg. *Aen.* X.185–8) and in Greek myth Kyknos (Swan) was a son of Ares who faced Herakles in single combat (Hes. *Scut.* 57–67, 345–423; *LIMC* vol. VII: 970–91).

Bibliography

- D.A. Amyx, *Corinthian Vase Painting of the Archaic Period* (Berkeley 1988).
 W. G. Arnott, 'Swan songs', *Greece and Rome* 24 (1977) 149–53.
 W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
 J.M. Asher-Greve, 'Women and agency: a survey from Late Uruk to the End of Ur III' in H. Crawford (ed.), *The Sumerian World* (London and New York 2013), 359–77.
 E. Bevan, 'Water-birds and the Olympian gods', *ABSA* 84 (1989), 163–9.
 J. Boardman, *Greek Gems and Finger Rings. Early Bronze Age to Late Classical* (Oxford 1970).
 A. Cambitoglou and S.A. Paspalas, 'Kyknos I', *LIMC* vol. VII (Zurich 1981–), 970–91.
 M.A. Dandamaev and V.G. Lukonin, *The Culture and Social Institutions of Ancient Iran* (Cambridge 1989).
 T. M. Davis, *The Tombs of Harmhabi and Touatânkhamanou* (London 1912).
 W.F. Edgerton, 'The Nauri Decree of Seti I', *Journal of Near Eastern Archaeology* 6.4 (1947), 219–30.
 F. L. Griffith, 'The Abydos Decree of Seti I at Nauri', *Journal of Egyptian Archaeology* 13.3–4 (1927), 193–208.
 F.-X. Héry and T. Enel, *Animaux du Nil. Animaux de Dieu* (Paris 1993).
 H.A. Hoffner, *The Laws of the Hittites. A Critical Edition* (Leiden 1997).
 P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
 P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 S. Lewis, *The Athenian Woman: an iconographic handbook* (London 2002).
Lexicon Iconographicum Mythologiae Classicae (Zurich 1981–).
 C. Maniquet, 'Le dépôt d'armes, d'instruments de musique et d'objets gaulois du sanctuaire de Tintignac à Navès (Corrèze)', in P. Ouzoulias and L. Tranoy (eds), *Comment les Gaules devinrent romaines* (Paris 2010), 21–34.
 J. Pollard, *Birds in Greek Life and Myth* (London 1977).
 E.D. Reeder, (ed.), *Pandora: women in classical Greece* (Princeton 1995).
 D. Stronach, *Parsagadae* (Oxford 1978).
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 P. Young, *Swan* (London 2008).
 E. Zimi, 'Spoons in the Greek world' in O. Palagia (ed.), *Greek Offerings. Essays on Greek Art in Honour of John Boardman* (Oxford 1997), 209–20.

WATER BIRDS

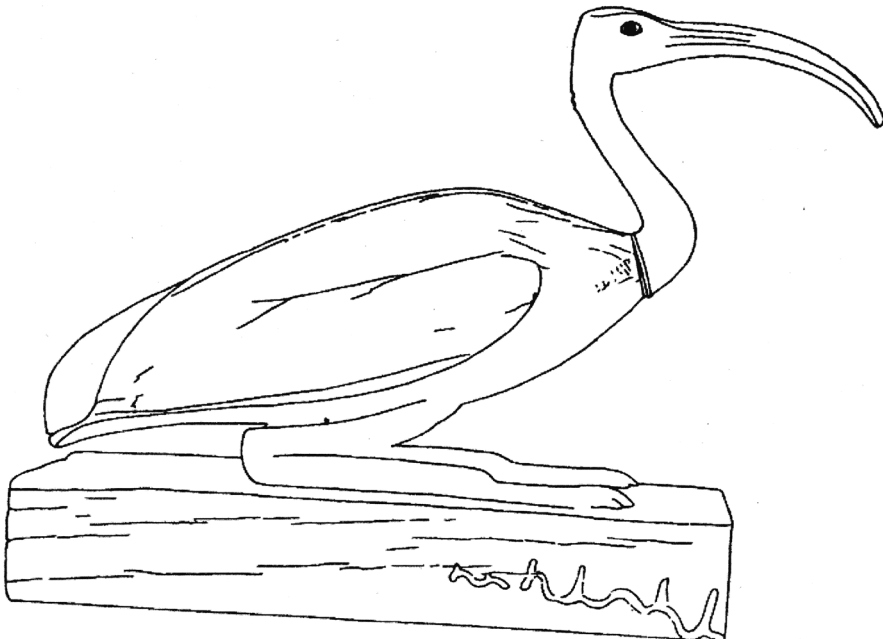
Given the importance of water to early Near Eastern civilisations, and in particular the centrality of the Nile in Egyptian thought and of the Tigris and the Euphrates in Mesopotamian culture, water birds figure prominently in the ancient sources. Although belonging to different families,

ibis, pelicans and herons were probably conceived of as a 'type', inhabiting, as they did, similar habitats and eating a similar diet of fish and crustaceans (on the complexities of the many species of water birds see Cocker 2013: 115–28, 140–4). Similarly, in classical Greece and Italy wetland areas existed in greater numbers than today, and birds such as pelicans, herons and spoonbills, which are now rare were familiar inhabitants. It has even been suggested that the Spartan placename Babyka that appears in the Great Rhetra meant 'place of the pelicans' (Chrimes 1949: 485–6).

As suggested above, the Greek term *erōdios* and Latin *ardea* were used to designate a large number of modern species: Aristotle describes three types of *erōdios*, the *pellos* (probably the grey heron), the *asterias* (bittern) and the *leukos* (the egret, and possibly also the spoonbill), all of which have a similar habitat and feeding habits (HA 593b 1–3, 609b 21–8, 616b 33–617a 8). Egrets and herons were a popular motif in Roman art, partly as an indicator of freshwater landscapes, and partly for their elegant silhouettes (Watson 2001: 367, 377–8). References to pelicans in classical texts are less detailed, perhaps because there seem to have been a number of localised dialect names for the bird, and they were also less common in art until the medieval period. The ibis, however, was considered an entirely Egyptian bird: it may have been an occasional bird of passage in Greece, and Pliny reported that the Waldrapp Ibis (*Geronticus eremita*) was known to breed in the Alps (NH X.133), but no classical author claims the ibis as a European bird. In his account of Egypt Herodotus described two kinds of ibis, the sacred and the black (II.75–6), and subsequently the ibis came to symbolise Egypt in classical thought, appearing in Nilotic paintings and on coins as an attribute of the personified Aegypta (Tammisto 1997: 55–6).

1. Sacred ibis

***Line drawing of a rectangular reliquary, Egypt, Late Period,
c. 700 BCE (London, British Museum EA64515)***



COMMENT: Statues of the ibis squatting on the ground with its long forelegs stretched out before it are common in the Late Period and throughout the Ptolemaic era (Wilkinson 1992: 88–9). The origin of the Greek word ‘ibis’ derives from the ancient Egyptian *heb(i)*, the sacred ibis (*Theskiornis aethiopicus*). It was easily distinguished by its bright white plumage and black head, legs and pinion feathers. The bird appears in a myriad of Egyptian texts and images and was a definitive way of representing river and marsh scenes. Most importantly, though, the ibis was identified as the sacred bird of the god Thoth, the moon-deity who was honoured as the divine scribe and lord of wisdom (the Egyptian connection between the ibis and the notion of learning is even reflected in the Hebrew bible’s book of Job 38: 36 – ‘Who gives the ibis wisdom’). Egyptian temples kept flocks of ibises, each selected according to their perfect markings; they were used as visible manifestations of the presence of the god.

Consequently, at Thoth’s main cult centre at Hermopolis Magna, the mummified remains of ibises were interred in their millions while at Tuna al-Gebel, the Ptolemaic catacombs contained so many mummified ibises that an estimated 15,000 ibis mummies must have been placed there every year. Ptolemaic ibis mummies frequently contain only parts of a bird – single bones, feathers or even dried grass taken from an ibis nest. Sometimes these mummy ‘dummies’ contained a curious assemblage of animal parts: bits of cats and fish, bones of an ichneumon and ibis bones have all been found tightly packed together and passed off as an ibis-mummy to paying pilgrims and worshippers of the god (Kessler and Nur el-Din 2005: 156). Even ibis eggs were sent to the catacombs at Tuna al-Gebel and the sheer numbers found have suggested to some scholars that a systematic breeding scheme had been established under the Ptolemies to cater to supply and demand for sacred offerings.

2. The heron: a manifestation of Osiris

Line drawing based on an image from the tomb of Inherkhau, Thebes, XX Dynasty (after Wilkinson 1992: 91)



COMMENT: The grey heron (*Ardea cinerea*) was considered by the Egyptians to be a divine manifestation of the resurrected god Osiris. It is often depicted in proximity to Osiris’ sacred willow tree or even wearing the Osirid crown, the Atef. The heron was recognised by its long straight bill and by the distinctive feathers which extend from the rear of its head; its neck and breast sport a thick tuft of feathers which make it distinct amongst other wading birds.

Egyptian artists frequently show the grey heron in marsh scenes but it is also depicted in mythological and religious compositions – it is sometimes depicted standing in the sacred barque of Re and in the Late Period the heron-hieroglyph was sometimes used to represent that god directly. Its association with the sun was therefore always stressed and the heron became the sacred bird of Heliopolis, morphing eventually into the phoenix of the Greek imagination. The bird's flight from water to sky was said to resemble the journey of the sun and its Egyptian name, *benu*, was probably derived for the verb 'to rise', *weben*. The heron's natural nesting pattern, whereby it piles up mud to create a nest above marsh water, was seen to replicate the creation of the primeval mound of earth – the *ben-ben* – which rose from the water (Wilkinson 2003: 212).

3. A heron on the right

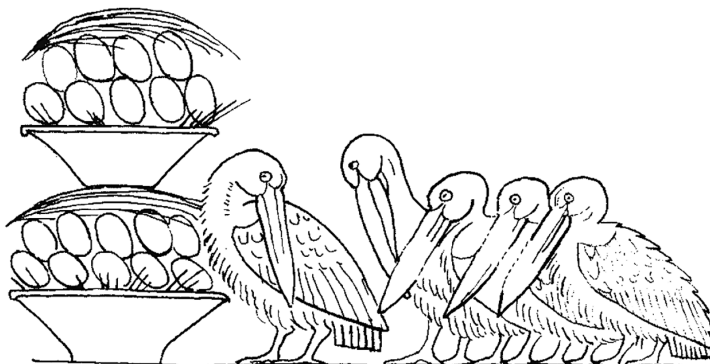
Homer Iliad X.272–7

So [Diomedes and Odysseus] armed themselves with baneful weapons and set out, leaving behind the princes in the camp. And Pallas Athena sent a heron to their right, close to the road; they did not see it in the darkness of the night, but heard its harsh cry. Odysseus was cheered at the appearance of the bird, and made a prayer to Athena. . . .

COMMENT: The *erōdios* which Odysseus and Diomedes hear but do not see as they set out into the Trojan night has been the topic of debate as far back as the first century CE: Alexander of Myndos wondered why Athena would send a heron instead of an owl as omen, given that the owl was more closely connected with her worship and is a nocturnal bird (Schol. Hom. *Il.* X.274). The site of Troy, on the plain of the Scamander, was suitable territory for marsh birds (cf. *Il.* II.459–62), but nevertheless it is not clear exactly which bird is meant as the source of the omen. It was clearly not a grey heron, which does not fly at night, and none of the other species encompassed by the word *erōdios* (egret, bittern and spoonbill) are any more likely. Arnott (2007: 48) suggests that it was a night heron (*Nyktikorax nyktikorax*), a solution which is attractive because the night heron is a nocturnal feeder and has a loud, harsh cry.

4. Roosting pelicans

Line drawing based on a wall relief from the tomb of Horemheb at Memphis, XVIII Dynasty



COMMENT: Migratory pelicans still spend their winters in Egypt and other warm places in Africa. In fact, three kinds of pelican are known in Egypt – the Dalmatian pelican (*Pelecanus crispus*), the Pink-backed pelican (*P. rufescens*) and the White pelican (*P. onocrotalus*) – and something of this variety is captured (albeit obliquely) in Egyptian sources, such as a Pyramid text (PT 254) of Unas: ‘The *hnt*-pelican announces; the *psdj.t*-pelican emerges.’ The pelican had mythological associations with the rising and setting sun, and groups of the birds were housed in temple precincts for solar cult purposes. In fact, the V Dynasty solar temple of Neuserre at Abu Ghurab depicts captive pelicans in the company of priests; a cryptic text reads, ‘when the sun sets and spends the night in his temple no mating (between the birds) is allowed. When the sky lightens (again) the power of procreation may start again, since the sun is (again) reigning over both sexes.’ The papyrus of Nu (British Museum EA 10477; XVIII Dynasty) regards the pelican as some sort of cosmic gate-keeper:

To be recited by NN:

The door-wings of the heavens stand open for me.

The door-wings of the earth stand open for me.

The bars of Geb stand open for me.

The ‘[first] palace of the spectator’ is open [for me]

He who guarded me has [untied] me.

He who tied his arm to me, has untied his arm.

[/////] mouth of the pelican

The mouth of the pelican is opened for me.

The pelican has caused that I shall go forth during the day to every place where I wish to go.

Given these solar-related themes, the presence of pelicans in tomb-scenes is not altogether strange. Those depicted in Horemheb’s Memphite tomb are very well rendered and carefully observed. They sit in a small flock, close to a basket of eggs (their own?); two are depicted grooming their feathers.

5. The voracious pelican

Pliny Natural History X.131

The *onocrotalus* is similar to a swan, and the only feature which distinguishes it is the fact that it has a kind of second stomach in its throat. Into this pouch the voracious bird packs all of its catch – its capacity is quite remarkable. Then once it has finished hunting it gradually passes the food into its mouth and thus to its true stomach, in the same way as ruminant animals. The *onocrotalus* is sent to Rome from the far north coast of Gaul.

COMMENT: Pliny’s account of the pelican is confusing: he describes it as a rarity which is sent to Rome from Gaul, and the claim that it is indistinguishable from a swan in all respects but one would imply that he has rarely seen a pelican. Yet his contemporary, the poet Martial, refers to pelicans on the river Po at Ravenna (*Ep.* XI.21.10), and Pliny should certainly have been familiar with the White Pelican (*Pelecanus onocrotalus*). It may be the case that in his research Pliny found a bird described under the unusual Greek dialect term *onocrotalus*, and thought that it must be different from the pelican which he knew; his claim that it bred only in the north of Europe leads Arnott to suggest that he conflated it with the gannet (2007: 157). Nevertheless, knowledge

about pelicans was surprisingly limited among all Greek and Roman writers: many repeated Aristotle's erroneous claim that they eat shellfish, holding them in their pouch until they open (Ar. *HA* 614b 26–30; Ael. *NA* III.20; Dion. *On Birds* II.7) – in fact pelicans eat only fish, and the throat pouch is used as a net for catching them – and later Christian writers adopted an even odder story about pelicans killing their young and reviving them with their own blood to make the pelican a symbol of parental devotion and self-sacrifice (*Physiologus* 8).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
K.M.T. Chrimes, *Ancient Sparta: a re-examination of the evidence* (Manchester 1949).
M. Cocker, *Birds and People* (London 2013).
D. Kessler and A. Nur el-Din, 'Tuna al-Gebel. Millions of ibises and other animals', in S. Ikram (ed.), *Divine Creatures. Animal Mummies in Ancient Egypt* (Cairo 2005), 120–63.
J.A. MacPhail Jr., *Porphyrus's Homeric Questions on the Iliad: text, translation and commentary* (Berlin 2011).
A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.
R.H. Wilkinson, *Reading Egyptian Art* (London 1992).
R.H. Wilkinson, *The Complete Gods and Goddesses of Ancient Egypt* (London 2003).

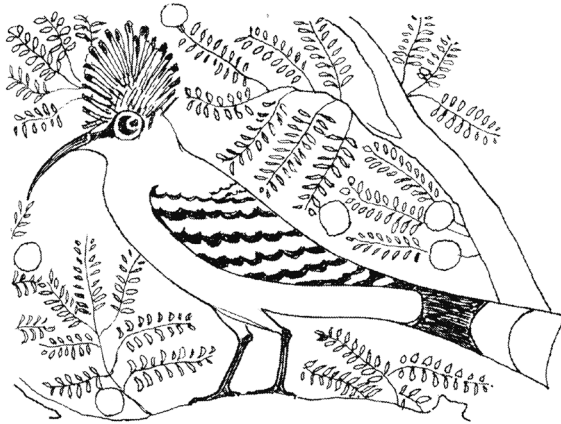
HOOPOE

The hoopoe is one of the most striking birds found in the Middle East and Europe, with its pink colouring, black and white wing bars and large flexible crest. It has had a deep cultural impact across the societies of both East and the West, entering into legend, myth and folk law (Cocker 2013: 323–6). The hoopoe was considered unclean in ancient Judaism (Leviticus 11; Deuteronomy 14) and yet in successive centuries it was regarded as a bird of wisdom, much beloved of King Solomon (Parmelee 1960: 121) and today it is the national bird of Israel.

Its name in both Greek (*epops*) and Latin (*upapa*) reflects its distinctive call – Aristophanes in his comedy *Birds* gives the hoopoe a cry of 'epopopoi popopopopoi' (227). It nested regularly in Egypt and was a summer visitor to both Greece and Italy; it perhaps seems to occupy a larger place in the Greek mind than it actually did because of the influence of *Birds*, which includes a hoopoe as leader of the bird chorus. Aristophanes' play was parodying Sophocles' tragedy *Tereus*, produced around 420 BCE, which dramatised the myth of the metamorphosis of Procne, Philomela and Tereus into the nightingale, swallow and hoopoe respectively. The myth remained well known throughout antiquity (Pausanias I.41.9; Ovid *Met.* 6.671–4), but the hoopoe itself was not a familiar bird of town and country – it is usually described as inhabiting wild places apart from humans, and its habits were not well understood. A strange tradition persisted that the hoopoe changed its feathers in the spring and turned into a hawk for half the year: this odd idea seems to originate in a fragment of a tragic play (Ar. *HA* 633a 17–28; Plin, *NH* X.86). Despite its striking appearance, the hoopoe is simply a woodpecker-like insect-eating bird, but as with the hyena it gained a reputation among the ancients as an uncanny and magical creature.

1. Hoopoe in an acacia tree

Detail of a wall painting from the Middle Kingdom tomb of Khumhotep II at Beni Hasan, c. 1878–37 BCE



COMMENT: The hoopoe is frequently depicted in Egyptian art and hieroglyphs. This well-known wall painting of a hoopoe is beautifully observed and realistically rendered. It nests in burrows, orchards and hollow trees, and the acacia was known to be its favourite haunt. Because the hoopoe was a breeding resident in Egypt, artists had plenty of opportunity to examine it and depict it with subtle accuracy; the hoopoe depicted here, for instance, is shown in his breeding plumage (Bailleul-LeSuer 2012: 149).

The hoopoe is first depicted in Egyptian art in the IV Dynasty and remained a popular subject throughout the Old and Middle Kingdoms. There is reason to believe that the bird was sometimes consumed and may even have been bred in captivity for this purpose. Hoopoes are very tame in captivity and are frequently shown held in the hands of children (Bailleul-LeSuer 2012: 25 fig. 1.4), suggesting that they were commonly kept as pets (Houlihan 1986: 118–20). According to a late Egyptian source, Horapollo (fifth century CE), the hoopoe was revered by Egyptians for honouring its parents; this may help explain the hoopoe's popularity as a children's pet.

2. The hoopoe in Egyptian love magic

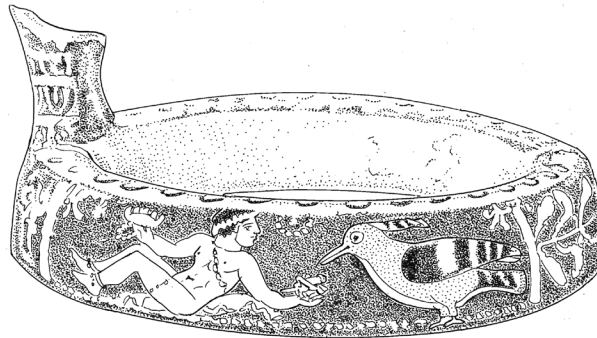
The Demotic Magic Papyrus of London and Leiden, Greco-Roman period

A method to put the heart of a woman after a man; done in one moment (?), and it comes to pass instantly. You take a swallow (?) alive, together with a hoopoe, (both) alive. Ointment made for them: blood, of a male ass, blood of the tick (?) from a black cow; you anoint their heads with lotus ointment; you utter a cry before the sun in his moment of rising; you cut off the heads of the two; you take the heart out of the right ribs of both of them; you anoint it with the ass's blood and the blood of the tick (?) off a black cow, as mentioned; you put them into an ass's skin; you lay them in the sun until they are dry for four days; when the four days have passed, you pound them, you put them into a box; you lay it in your house.

COMMENT: Typical of love magic is the mingling of the blood of two species. Here the blood of the hoopoe is joined with that of a swallow. Although never a sacred bird, the hoopoe did nonetheless have religious associations and its image is often included in vignettes on funerary papyri, on coffins and on magical papyri (Houlihan 1986: 120). As a symbol of virtue and loyalty, the blood of the bird perhaps ensured fidelity and constancy in the love spells.

3. Hoopoes in classical art

South Italian ring-askos, Paestum 26635, from Paestum, fourth century BCE (drawing by Tessa Rickards)



COMMENT: This unusually shaped vase, a small flask for oil or perfume with a circular body (Trendall 1987: no. 154), was produced at the Greek colonial settlement of Poseidonia in Italy, later Roman Paestum, a site where hoopoes are still commonly seen today. Its depiction of a hoopoe (on a more than lifesize scale) is extremely accurate, showing both its barred wings and the black and white tipping to its folded crest, and its appropriate food – the young man tempts it with a cricket. The hoopoe is unusual in classical art, but the painters of Paestum, who show a general interest in the accurate depiction of bird species, quite often chose to depict it: very recognisable hoopoes also appear on a Paestan *lebes gamikos* now in Madrid and on a *lekanis* in St Petersburg (Schauenburg 1985: 64). It seems likely that the hoopoe was considered a distinctive feature of the city.

Among the few other representations from the classical world are a single hoopoe which appears sitting in a bush among the partridges of the Minoan Partridge Fresco in the Pavilion of the Caravanserai at Knossos (Immerwahr 1990: 78–9 and pl. 30), and occasional appearances in Roman wall-painting and mosaics, most commonly in an Egyptian setting (Tammisto 1997: 69).

4. Magical hoopoes

Aelian On the Nature of Animals III.26

Hoopoes are the most unfriendly of birds, it seems to me because they remember their former human existence and for that reason hate all women, and make their nests in deserted places and the high crags; and in order to keep men away from their chicks these birds cover their nests not with mud but with human excrement, deterring the creature which is their enemy with the foul and disgusting smell.

It once happened that a hoopoe made its nest in a crack in the wall of an isolated part of a fort, where the stone had split over time, and a guard from the fort, seeing the nestlings inside, plastered over the hole with mud. When the hoopoe returned and found that it was shut out, it brought a herb and pressed it against the mud. This flowed away and the bird went in to its chicks, then flew away again to fetch food. The guard again plastered over the nest, and the bird reopened the cleft with the same herb; and again a third time. The guard then, seeing what the herb had done, gathered some of it himself and used it, not as the hoopoe had done, but to open the treasure stores of others.

COMMENT: Aelian's account of the hoopoe is clearly fanciful, but it reflects some common ancient beliefs about the bird. It is true that hoopoes' nests are often ill-smelling from the birds' own droppings, but the idea that they were built from excrement, which originates with Aristotle (*HA* 616a 35–b 1), owes more to folklore than observation. The story is in itself rather contradictory, since the second part shows a hoopoe nesting alongside humans, not out in the wild, and the motivation of the guard for plastering over a bird's nest with the chicks inside is not satisfactorily explained. The story derives, however, from the hoopoe's reputation as a magical creature which originated in Egypt: it is said in the *Cyranides*, a fourth-century CE compilation of magical spells and medicines, to bestow the gift of divination, and to be effective as an amulet to bring victory in battle, protection from wild beasts and success in all enterprises. (I.7.49–69, 21.29–35, II.3.8–14, 39.14–18: see Pollard 1977: 132).

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
R. Bailleul-LeSuer, *Between Heaven and Earth. Birds in Ancient Egypt* (Chicago 2012).
M. Cocker, *Birds and People* (London 2013).
W.R. Dawson, 'The lore of the hoopoe', *Ibis* 12 (1925), 31–55.
P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
S.A. Immerwahr, *Aegean Painting in the Bronze Age* (University Park 1990).
A. Parmelee, *All the Birds of the Bible* (London 1960).
J. Pollard, *Birds in Greek Life and Myth* (London 1977).
K. Schauenburg, 'Herakles und Eulen auf einem Krater der Sammlung Geddes', *MDAI(R)* 92 (1985), 45–64.
A. Tammisto, *Birds in Mosaics: a study on the representation of birds in Hellenistic and Romano-Campanian tessellated mosaics to the early Augustan age* (Rome 1997).
A.D. Trendall, *Red-Figure Vases of Paestum* (London 1987).

OSTRICH

The ostrich is the world's biggest bird. An adult male can stand nearly two and a half metres tall and can weigh as much as three hundred pounds. Though flightless, after the cheetah the ostrich is the fastest animal on earth. Males have conspicuous black and white plumage; hens are coloured brown and are of a smaller build than the males, though nevertheless still powerful creatures. While basically vegetarian, ostriches will eat insects, especially locusts. They live in flocks of between five and fifty, normally in the company of grazing animals like gazelles and giraffes (Clines 2012: 1125).

The ostrich was once found all over the ancient Near East, in both desert regions (where rock-carved images of the bird are amongst the earliest depictions of wildlife known to exist

(Laufer 1926)) and in coastal plains. They were found from Kush and Egypt, across the Levant, to Mesopotamia; hence ancient words for ‘ostrich’ are plentiful (Egyptian, *nīw*; Akkadian, *gam-gam-mu*, *se-ip-a-rik*; Hebrew, *renanim*, *ya’en*, *ya’ana*). There is some evidence that ostriches were domesticated by the Egyptians: they were certainly paraded in royal tribute processions as exotic products from Libya, Punt, Syria and Nubia (Houlihan 1986: 5. fig. 4), and in the Ptolemaic period, eight pairs of ostriches walked in harnesses in Ptolemy II’s Alexandrian procession (Athen. *Deipn.* 200f). It is difficult to identify the point at which the ostrich became known to the Greeks and Romans: all the descriptions that we have from classical antiquity seem to imply an audience already familiar with the bird. One reason for this is that ostrich products, eggs and feathers, formed part of the Mediterranean trade in luxury items from the earliest times. Ostriches themselves are rarely mentioned in Greek sources, and it was not until Hellenistic times that they began to form part of displays or menageries; certainly there is no evidence for the presence of ostriches in Greece. In contrast, Roman contacts with North Africa and the East seem to have ensured that ostriches were an early import into the Roman arena (see below) and they became a regular feature of animal hunts at Rome and in the provinces (see SPORT no. 12).

The ostrich’s initial name in both Greek and Latin (*struthus*, *passer*) meant ‘sparrow’, a strange transference perhaps intended to belittle an alarming, and even hostile, creature. Later, however, it was succeeded in both languages by *struthiocamelus*, sparrow-camel, a portmanteau term that emphasised the ostrich’s hybrid nature (Arnott 2007: 228–9). They were eaten by the Romans, although the claim that Firmus, a third-century CE usurper under Aurelian, could eat a whole ostrich in a day is unlikely to be true (SHA *Firmus* 4.2); their use for the table was a form of conspicuous consumption. In neither culture, however, does the ostrich appear to have inspired appreciation or affection: the ancients found its liminal status between bird and animal troubling, and it was neither an impressive predator like the tiger or crocodile, nor a domesticable rarity such as the peacock or elephant. Unlike other exotic birds such as the peacock and guinea-fowl, the ostrich developed no divine associations or place in myth, and stories of its stupidity, voracious and indiscriminate appetite and poor parenting dominate our sources.

1. Observations and misconceptions

Hebrew bible, Job 39:13–18

The wings of the ostrich flap joyfully,
 though they cannot compare
 with the wings and feathers of the stork.
 She lays her eggs on the ground
 and lets them warm in the sand,
 unmindful that a foot may crush them,
 that some wild animal may trample them.
 She treats her young harshly, as if they were not hers;
 she cares not that her labour was in vain,
 for God did not endow her with wisdom
 or give her a share of good sense.
 Yet when she spreads her feathers to run,
 she laughs at horse and rider.

COMMENT: Like most birds, the ostrich fared badly in the Hebrew bible: it is listed as unclean at Leviticus 11.16, although outside Hebrew society the bird was widely eaten. Job employs the

Hebrew word *ya'en* for the ostrich, deriving as it does from a root meaning 'greedy' – which may refer to the bird's habit (at least in captivity) of swallowing items that may cause death. Job thought that Yahweh had deprived the bird of wisdom, an idea which has had a long-lasting effect on attitudes towards it: over the centuries the ostrich has been much maligned for its alleged lack of sense (Williams 2012).

Job creates a marvellously rich cameo about the ostrich and its apparently paradoxical nature. It has fine feathers, but lacks the ability to fly; it makes a nest on the ground and not in the trees. In fact Job is the first to voice a commonly held ancient belief that the female ostrich routinely abandoned her nest, and that the heat of the sun was used to hatch her eggs. There was also a belief that the ostrich was cruel to its young, and elsewhere in the bible it is said to be an unpleasant creature and a bad parent: 'even jackals offer their breasts to nurse their young, but my people have become heartless like ostriches in the desert' (Lamentations 4:2–4). In fact ostrich hens are very attentive to their nests and incubate the eggs zealously; eggs which are left unincubated will rot or be eaten by foraging predators. Hens will, however, run away from their chicks when hunters approach, probably to distract the hunters from the young (Cansdale 1970: 193; Clines 2012: 1126).

Job notes the joyful flapping of the ostrich's wings, and here he shares an observation recorded by an unknown Egyptian who was aware of the remarkable early morning behaviour of these flightless birds when they run around displaying their prowess by bellowing loudly and vigorously flapping their wings. Pharaoh Ahmose I was thus described in a stele as being, 'like Atum in the east of the sky when the ostriches dance in the valleys' (Kuentz 1924: 85). He also notes the bird's incredible speed, which exceeds that of a mounted rider on horseback, and that it uses its wing feathers as a sail to gather velocity.

2. Ostrich feather fans

New Kingdom fans from Thebes



COMMENT: In Egypt's hot climate the fan was a necessary accessory for all nobility, intended to provide shade as well as a cooling breeze. Tutankhamun, for instance, was buried with eight fans – a single hand-held and seven mounted on poles of varying lengths for operation by courtiers. Fans were called *shuwt* ('shadow') or *seryt* ('royal or military standard'). One of Tutankhamun's fans, showing the scene of an ostrich hunt, bears an inscription on the handle relating how the feathers were obtained, 'by His Majesty when hunting in the desert east of Heliopolis.' The most remarkable of Tutankhamun's fans was small (18cm long) with an exquisite rotating handle of ivory; it was engraved with the king's throne names and titles. The fan was found in a white painted wooden box in the Treasury of the pharaoh's tomb where its ostrich feathers, predominantly white (now turned light brown with age) with a shorter row of brown at the base, were preserved intact; according to Howard Carter upon its excavation it was, 'as perfect as when it left the hands of the boy king' (cited in Reeves 1990: 149).

Ostrich-feather fans are often depicted in tomb paintings, and can symbolise the divine presence of the pharaoh. They were included in royal and elite tombs because they were thought to restore the breath of life to the deceased as well as to provide comfort in the afterlife. Ostrich-feather fans were also regularly carried by courtiers in royal processions and religious ceremonies where the main characterising features of the fans were the long handles terminating in an elongated palm holding several long ostrich plumes. They were used chiefly as sunshades. The position of fan-bearer was considered to be one of the highest offices among court officials: so important was the title of 'Fan-bearer on the Right of the King' that it was given to the king's viceroy, the trusted military commander in charge of the area of Nubia and the Sudan.

A single ostrich feather represented the goddess Maat who was the personification of Truth and Cosmic Harmony. Long-handled fans with one ostrich feather were also held by courtiers (especially princes) and anyone holding this item was naturally assumed to uphold the qualities of Maat.

3. A winged hero pursuing an ostrich and its chick

Cylinder seal impression, Mesopotamia, Middle Assyrian period, c. 1250–1150 BCE (Pierpont Morgan Library, seal 606)

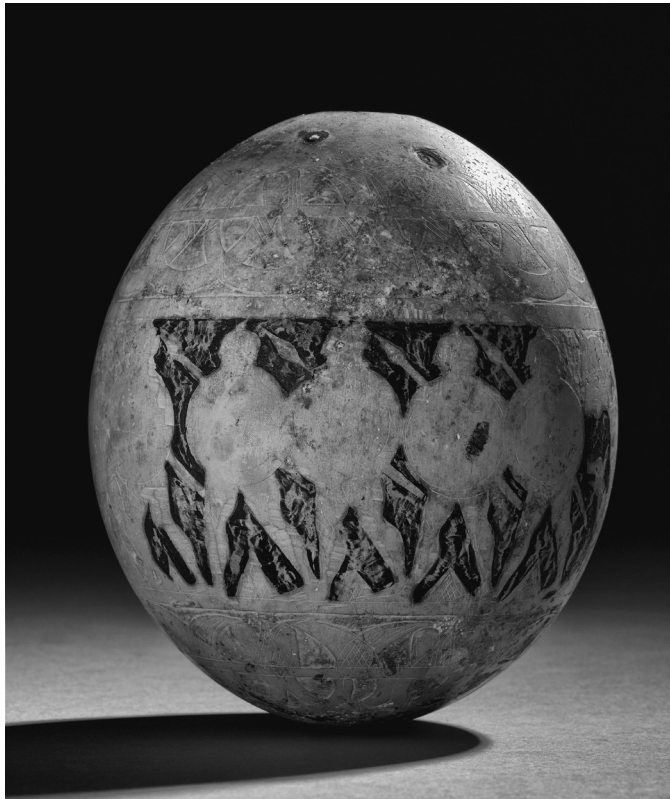


COMMENT: A mythical hero pursues an adult ostrich, here possibly representing the earthly equivalent of the griffin, the conveyor of death: the Assyrians may have seen an earthly counterpart to the supernatural griffin in this bird, because of its size and because it lives in the desert, which was believed to be an abode of the dead. There are numerous seal representations of ostrich hunts (divine and real) from Mesopotamia and Iran and the motif of a hero strangling two ostriches with his hands provides an interesting spin on the standard scene of a hero strangling lions or bulls (Clines 2012: 1127). The ostrich, whose powerful legs and clawed feet can disembowel a man at a single kick, was regarded as a worthy rival for mythical heroes. On this particular seal the ostrich's adversary is associated with the aerial world of the sky because of the wings which emerge from his lower back.

The fleeing ostrich, with its head turned back in fear and fury and its feathers bristling, ranks among the greatest Mesopotamian depictions of animals: the details are extraordinarily fine. In the biblical *Book of Job* (above), the ostrich is considered a malevolent creature because it disdains its young, but the presence of the young ostrich in close proximity to its parent seems to contradict that view.

4. A decorated ostrich egg from an Etruscan grave

*Phoenician carved and painted ostrich eggshell, London
British Museum 1850.0227.9, from Isis Tomb, Vulci, Italy, seventh
century BCE. © The Trustees of the British Museum*



COMMENT: Ostrich eggs, carved or painted, were one of the exotic luxury items often presented as gifts or as tribute in Egyptian and Mesopotamian societies (Laufer 1926; Houlihan 1986: 4–5); they were also made and exported around the early Mediterranean by the Phoenicians. Some, like this example, are relatively simple, while others were made into drinking vessels with the addition of a precious metal rim (Rathje 1979). Their role in Phoenician society was primarily funerary: the symbolism of the egg made it suitable as a grave offering, and both whole eggs and fragments of shells decorated with masks are common in West Phoenician graves from Carthage, Sardinia and Spain (Moscati 1999: 506–12). From the seventh century BCE onwards imported ostrich eggs are also found in considerable numbers as grave offerings among the Etruscans in Italy (Rathje 1979) and as dedications in Greek temples such as the Samian Heraion (Boessneck and von den Driesch 1983); the egg exhibited in a Spartan sanctuary as the one from which Helen hatched (having been fathered on Leda by Zeus in the form of a swan) was probably also an ostrich egg (Pausanias III.16.1). While ostrich feathers obviously do not survive in the archaeological record, it seems likely that these, too, were imported to Greece and Rome, as feather fans (Miller 1997: 198–206) or as decoration – Aristophanes’ *Acharnians* 1103–5 refers to ostrich plumes on a military helmet. The early trade in ostrich products thus familiarised Mediterranean peoples with the idea of a giant flightless bird – the size of the eggs alone indicates their extraordinary stature – and ostriches themselves became known even though they were rarely seen in the flesh. This is undoubtedly why Herodotus, who provides careful descriptions of the hippopotamus and crocodile, assumes that ostriches are completely familiar to his audience (IV.175, 192).

5. Ostrich-riders in Athens?

*Attic black-figure skyphos, Boston Museum of Fine Arts,
520–10, no provenance (drawing by Tessa Rickards)*



COMMENT: If the birds depicted on this skyphos are indeed ostriches, this is both the earliest reference to them by a classical source, and an indication that a sixth-century Greek audience knew of, and could recognise, an ostrich. But the interpretation of the scene is tricky: the image is one of choral performance, and these are not to be understood as real ostriches being ridden, but as bird costumes, part of a tradition of animal choruses in which the participants dress up as or ride on different animals – the other side of the pot depicts dolphin-riders (Rothwell 2006: 71–3). Two other skyphoi of the same period depict female ostrich-riders in a similar theatrical context (Paris Louvre F410, Guardia Perticara 15223 (Borgers 2003: no. 36)), and the three scenes may relate to a single dramatic performance. But are the birds on this pot meant to be understood as ostriches? While their body shape is appropriate, their neck colour is rather different and their legs disproportionately short; on the other examples the birds show more similarities to marsh waders such as egrets (Benton 1961). But this probably means only that the painters were unsure of the exact appearance of the ostrich – as on the similar skyphos depicting a camel – and were drawing on a knowledge of large native birds for their representation. Rothwell finds it difficult to account for the inclusion of ostriches among animal chorus types, noting that they have no mythological symbolism, but the purpose of the performance need only have been a combination of humour and exoticism. There are a few Hellenistic and Roman references to the riding and driving of ostriches in real life (Toynbee 2013: 240), though these were clearly attempts by the very wealthy to demonstrate their status with such ostentatious and impractical mounts.

6. Ostrich behaviour: fact and fiction

Diodorus Siculus Bibliotheca II.50

This land (the east of Syria) also produces creatures which are dual in nature and of mixed form, such as those called ‘*struthiocameloî*’ (sparrow-camels), which combine the character of the goose and the camel, as their name suggests. They are about the same size as a new-born camel calf; their heads are covered with fine hairs and they have large dark eyes indistinguishable from those of the camel. They have a long neck and a short beak which comes to a sharp point. The ostrich’s wings are covered with soft feathers and since it walks on two legs and has two-toed feet it appears to be both a land animal and a bird. Its weight makes it unable to rise into the air and fly, but it runs swiftly on its toes along the ground, and when it is hunted by horsemen it kicks the stones which it casts up with its feet with such force at the hunters that they are often seriously wounded. And when it is overtaken and surrounded it hides its head in a bush or similar shelter, though not, as some people think, because (being stupid and slow-minded) it thinks that if it cannot see the hunters, they cannot see and capture it, but because its head is the weakest part of its body, and it shelters it to save its life.

COMMENT: Diodorus describes the Arabian ostrich in book II of his history – ostriches were seen in antiquity as primarily Arabian birds – and in book III adds a further account of the African ostrich, noting in addition its large scaly legs. Many ancient writers comment on it as an intermediate creature between birds and land animals (e.g. Pliny *NH* X.1; Aesop 418 Perry); Aristotle includes it with his description of other taxonomically challenging creatures such as the whale, the seal and the bat (Ar. *PA* 697b15). But despite these concerns, most ancient coped easily with the concept of a flightless bird: they realised from observation that ostriches used their wings to gain speed when running on land – Xenophon in his *Anabasis* (I.5.3) says that it hoists its wings and uses them as a sail, and at III.28.3 Diodorus compares a running ostrich to a ship

under sail. All writers dwell on its great speed in the context of hunting, because ostriches are very difficult to chase down, even on horseback; we hear instead of various methods of trapping them (Aelian *NA* XIV.7).

Ancient understanding of the ostrich and its habits was generally good: Aelian accurately describes its nest, with a raised lip to protect the eggs from rain, and its parenting methods (IV.37, XIV.7). But as this extract shows, the idea that when threatened the bird hides its head and believes that it is therefore concealed from hunters was already firmly rooted by the first century BCE, though Diodorus here rejects it as false.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
S. Benton, 'Cattle egrets and bustards in Greek art', *JHS* 81 (1961), 44–55.
J. Boessneck and A. von den Driesch, 'Weitere reste exotischer Tiere aus dem Heraion auf Samos', *MDAI* 98 (1983), 21–4.
O. Borgers, *The Theseus Painter: style, shapes and iconography* (Amsterdam 2003).
G. Cansdale, *Animals of Bible Lands* (London 1970).
D.J.A. Clines, *Job 38–42* (Nashville 2012).
G.R. Driver, 'Birds in the Old Testament I. Birds in law', *PEQ* 87 (1955), 5–20.
G.R. Driver, 'Birds in the Old Testament II. Birds in life', *PEQ* 87 (1955), 129–40.
P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
C. Kuentz, 'La danse des autruches', *BIFAO* 23 (1924), 80–7.
B. Laufer, *Ostrich Egg-shell Cups of Mesopotamia and the Ostrich in Ancient and Modern Times* (Chicago 1926).
M.C. Miller, *Athens and Persia in the Fifth Century BC* (Cambridge 1997).
S. Moscati, *The Phoenicians* (New York 1999).
A. Parmelee, *All the Birds of the Bible* (London 1960).
J. Pollard, *Birds in Greek Life and Myth* (London 1977).
A. Rathje, 'Oriental imports in Etruria,' in D. Ridgway and F.R. Ridgway (eds), *Italy before the Romans: the Iron Age, Orientalising and Etruscan periods* (London and New York 1979), 174–6.
N. Reeves, *The Complete Tutankhamun* (London 1990).
K.S. Rothwell Jr., *Nature, Culture and the Origins of Greek Comedy: a study of animal choruses* (Cambridge 2006).
J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
E. Williams, *Ostrich* (London 2012).

Reptiles and amphibians

CROCODILE

In antiquity, the Nile crocodile (*Crocodylus niloticus*) inhabited most of the Nile river basin. With over sixty teeth and jaw muscles of enormous strength, from its snout to the tip of its tail, it can reach six metres in length, making it one of the world's most impressive crocodilian species. Its eyes, nose and ears are high up on the top of the skull, so that the crocodile can be almost completely submerged, yet still hear, see and breathe. While submerged, a protective membrane closes over a crocodile's eyes, affording it good sight; the creature also has a very good sense of smell with large olfactory lobes in the brain. It is often found alongside streams and lakes, where it basks in the sunshine with open jaws, a position that helps it cool down. Inactive in this position, the crocodile is tended to by both the Egyptian plover (*Pluvianus aegyptius*) and the spur-winged lapwing (*Vanellus spinosus*) which pick at and clean the crocodile's teeth (below no. 6). Like all reptiles, crocodiles are cold-blooded and rely on the temperature of the sun to warm up, although excessive heat drives them into the water. Crocodiles do not normally chase their prey and their typical hunting strategy is one of surprise: lunging at prey, they are able to use the tail and powerful hind legs to spring out of the water. Crocodiles only eat about fifty full meals a year and can go for long periods without eating; nesting females, which are extremely attentive parents, generally fast for the entire incubation period of ninety days. Males are territorial, patrolling and defending a length of shoreline that may extend up to fifty metres out into the water (Wylie 2013).

For the ancient Egyptians the crocodile was a force to be reckoned with; it was a common and dangerous animal which frequented one of the busiest and most important spheres of human habitation – the water's edge. Its Egyptian name, *msh*, was written with a determinative of a crocodile figure, a determinative used in the writing of words such as 'lust' and 'aggression'. The amphibious and nocturnal nature of the crocodile linked it to the dark chaotic forces of pre-creation and its menace needed to be neutralised. Spell 31 from the *Book of the Dead* is therefore called 'A Spell for Repulsing a Crocodile', while New Kingdom incantations recorded in the Harris Papyrus are aimed at keeping crocodiles at bay. Unsurprisingly, images of men spearing crocodiles are commonly depicted in tomb art. On the other hand, when the crocodile emerged from the waters of the Nile and basked in the early morning sunshine, it became associated with the sun god Re; its consumption of fish – popularly thought of as the cosmological enemies of

Re – further strengthened the crocodile’s image as the supporter of the sun god (Wilkinson 1992: 105). As a consequence the cult of the crocodile god Sobek flourished at Crocodilopolis, Kom Ombo, and elsewhere in Egypt (for a detailed treatment see Vernus and Yoyotte 2005: 209–40).

Mesopotamian peoples had some difficulty classifying the exotic crocodile, which was not indigenous to their lands (Lambdin 1953). The Akkadian word *kušu* was sometimes used; it was also used for some kind of aquatic demon. The Akkadian corresponds to two Sumerian words, ‘kušú’ with a determinative ‘ku6’ (‘fish’), which seems to refer to a terrifying creature living in the marshes, and ‘kud.da’ referring to an animal hide. In the Neo-Assyrian period the Akkadian for crocodile was *namsuḫū*, clearly an Egyptian loan word. In a text of Tiglath-pileser I, therefore, the king boasts that even Pharaoh sent him tribute: ‘The king of Egypt sent a large monkey, a crocodile, and other large sea animals and [Tiglath-Pileser] let his people see them’ (*Chicago Assyrian Dictionary* sv. *namsuḫū*).

For the Greeks and Romans, the crocodile was Egypt: it was the single creature that best represented the exoticism of that alien culture. The Nile crocodile was the one which commanded the ancient imagination, though Alexander’s army also encountered crocodiles in the rivers of India (Strabo XV.1.25) and Aelian describes the gharial of the Ganges (NA XII.41). While the Nile crocodile grows to about six metres at most, its reported size grew throughout classical antiquity, until Aelian in the third century CE was recounting tales of crocodiles more than twenty-six cubits long, more than twelve metres (NA XVII.6). Crocodiles are in general sluggish animals, but ancient writers dwell extensively on their ferocity: stories of their rapacity were common, such as Diodorus’ account of Perdiccas’ disastrous incursion into Egypt in 321 BCE (XVIII.35.6): his men in retreat were forced to swim across the Nile, and while some were drowned, most were eaten by ‘the animals in the river’. The Egyptians encouraged the image of the man-eating crocodile, ultimately turning their sacred crocodiles into a tourist attraction (below no. 5). Images of crocodiles were widespread in Roman art, primarily in Nilotic scenes in Italy and the provinces (see HIPPOPOTAMUS no. 9; Versluys 2002), and Pliny (NH XXVIII.107) describes the use of crocodile teeth as amulets.

Ancient zoological writers also identified a creature known as the ‘land crocodile’, inhabiting north Africa (Hdt. IV.192; Plin, NH XXVIII.108), which seems to have been a kind of monitor lizard, and it was this animal which was the source of the ‘crocodile dung’ mentioned by Latin writers for its use as a cosmetic to lighten the skin (Gibson 2002: 206).

1. Job’s Leviathan: a crocodile

Hebrew bible, Job 41:12–34

I will not fail to speak of Leviathan’s limbs,
its strength and its graceful form.
Who can strip off its outer coat?
Who can penetrate its double coat of armour?
Who dares open the doors of its mouth,
ringed about with fearsome teeth?
Its back has rows of shields
tightly sealed together;
each is so close to the next
that no air can pass between.
They are joined fast to one another;
they cling together and cannot be parted.

Its snorting throws out flashes of light;
its eyes are like the rays of dawn.
Flames stream from its mouth;
sparks of fire shoot out.
Smoke pours from its nostrils
as from a boiling pot over burning reeds.
Its breath sets coals ablaze,
and flames dart from its mouth.
Strength resides in its neck;
dismay goes before it.
The folds of its flesh are tightly joined;
they are firm and immovable.
Its chest is hard as rock,
hard as a lower millstone.
When it rises up, the mighty are terrified;
they retreat before its thrashing.
The sword that reaches it has no effect,
nor does the spear or the dart or the javelin.
Iron it treats like straw
and bronze like rotten wood.
Arrows do not make it flee;
Sling-stones are like chaff to it.
A club seems to it but a piece of straw;
it laughs at the rattling of the lance.
Its undersides are jagged potsherds,
leaving a trail in the mud like a threshing sledge.
It makes the depths churn like a boiling caldron
and stirs up the water like a pot of ointment.
It leaves a glistening wake behind it;
one would think the deep had white hair.
Nothing on earth is its equal—
a creature without fear.
It looks down on all that are haughty;
it is king over all that are proud.

COMMENT: As Clines (2011: 1190–1201) has demonstrated, Job's Leviathan is actually a vivid poetic portrait of a crocodile (see further Keel 1993). In fact, references to flaming mouth aside, it ranks as one of the most masterful descriptions of a crocodile from any period of history. In spite of some hyperbole, a real crocodile emerges from the poem, suggesting the poet's personal knowledge. Crocodiles were certainly known in Israel and Palestine; their remains have been found around Mount Carmel and the river Zerka is still known as 'Crocodile River'. It is clear that while Job's crocodile is itself fearless, it inspires fear in all who encounter it; the crocodile is seen to be the king of all creatures and, in many ways, it is to be regarded as one of Yahweh's creative masterpieces.

2. Crocodile observations

Egyptian proverbs and sayings from the Old Kingdom, New Kingdom and the Late Period (after Lichtheim 1973 and 1980)

a) A satire on professions

The washerman launders at the riverbank in the vicinity of the crocodile . . . I mention for you also the fisherman. He is more miserable than one of any other profession, one who is at his work in a river infested with crocodiles. When the totaling of his account is made for him, then he will lament. One did not tell him that a crocodile was standing there, and fear has now blinded him.

b) Popular sayings

A crocodile does not die from worrying, it dies from hunger.
A crocodile does not get hold of a towns person.
If a crocodile loves a donkey, it puts on a wig.
If a woman loves a crocodile, she takes on its character.
When the crocodile shows itself its reputation is measured.
An evil man who is calm is like a crocodile in water.
One cannot remove the poison of the crocodile, the snake, or the evil man.
Crocodiles are gluttons on their catch. . .
The crocodile . . . makes no sound, dread of it is ancient.
Behold, my name is detested,
More than a smell of crocodiles,
More than sitting by banks full of crocodiles.

c) From a love poem

An arm of the river lies between us and crocodiles lurk on the sand-banks.

d) Spell to render a crocodile harmless

Stop crocodile, son of Seth! Do not wave your tail; do not move your legs; do not open your jaws: may the water become a wall of flame in front of you! Stop crocodile, son of Seth!

e) Curse from the mastaba of Meni

May the crocodile be against him in the water, may the snake be against him on land, if he does anything against this (tomb).

COMMENT: Farmers, fowlers, herds men, launderers, water-carriers and bathers were all potential victims of the crocodiles who inhabited the waters and banks of the Nile and its myriad canals. They had to remain vigilant because a crocodile-attack meant almost certain death. A crocodile is happy to supplement its fish diet by aggressively hunting game, fowl and sometimes human beings.

With more than just a passing familiarity with this dangerous reptile, the Egyptians had the crocodile enter into many sayings and stories, each reflecting on the inherent terror located in this creature. One popular story, *The Dispute Between a Man and his Ba*, tells of a grisly episode in which a peasant loses his wife and all of his children to the crocodiles when their papyrus skiff capsizes and throws them into the Nile. The Westcar Papyrus tells of a beeswax crocodile, magically made real, which attacks and kills an adulterer when he enters a lake to bathe and a series of tomb-reliefs depict a common motif: herders are shown driving cattle to pasture by fording through a canal and one of the cowherds is shown carrying a calf on his shoulders, out of the hidden dangers of the water. One such VI Dynasty scene from the mastaba of Ankhmahor at Saqqara has the episode accompanied by a text: 'Crossing the canal by the cattle. Warding off death. Warding off the crocodile by the herdsman.' One of the herdsmen is shown pointing a finger at the waters as he utters a spell to protect his fellow-drovers: 'Oh herdsmen there! Let your face be watchful for this marsh-inhabitant. May he come as a sightless one. Let your face be very watchful for him!' Other scenes depict other actions: crocodiles are speared and killed by men in fishing boats.

The domination of crocodiles was boasted of by successive warrior pharaohs: 'I have curbed lions, I have carried off crocodiles, I have crushed the people of Wawat, I have carried off the Medjay, I have made the Asiatics slink like dogs' (Teaching of King Amenemhet I). The crocodile was frequently used as a metaphor for Pharaoh himself. In a victory hymn in praise of Thutmose III, for instance, the god Amun-Re addresses the king directly, saying: 'I cause them [the king's enemies] to see thy majesty as a crocodile, the lord of fear in the water which cannot be approached' (Clines 2011: 1201).

3. Mask for a crocodile mummy

Wood and gold leaf, from the Fayum, Late Period or Ptolemaic Period, c. 664–30 BCE (New York, Metropolitan Museum of Art 12.182.33). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: For the Egyptians, the Nile crocodile was a sacred beast, closely associated to the god Sobek whose major cult-centres were located at Kom Ombo in Upper Egypt and in the richly fertile marshes of the Faiyum. Sobek had already reached cultic importance in the Early Dynastic Period at Lake Birket Qarun, 'the Lake of Sobek', in the Faiyum and entered into the V Dynasty Pyramid Texts as an avatar of the deceased pharaoh. Sobek was depicted in both crocodile form and as a crocodile-headed man and became increasingly popular throughout the Middle Kingdom where his importance is reflected in such royal names as Sobekhotep ('Sobek is satisfied'). In the XVIII Dynasty Sobek's cult was further amplified by Amenhotep III who built a sanctuary for the god at Sumenu in Upper Egypt; from this site comes a colossal calcite statue of Sobek presenting the king with the *ankh*-sign.

While the god has few myths, his epithets, linking him to the powerful amphibious reptile, are plentiful: Sobek is 'pointed of teeth', 'standing on his claws', 'who lives on robbery', 'who eats while he mates', 'who impregnates females'; he is 'alert-looking, broad-chested, sparkling. . . , the legs and tail of the Great One, who is in splendour.' A Ramesside hymn captures the contradictory nature of the deity (Wylie 2013: 14):

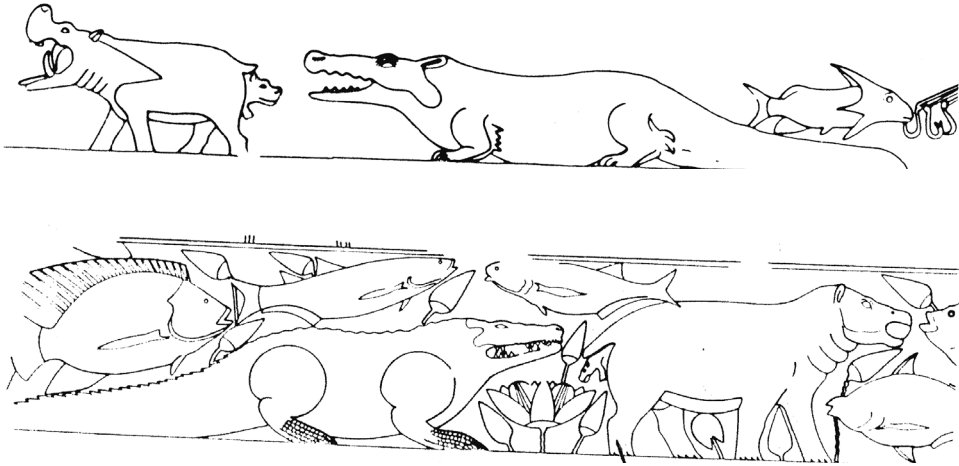
'Hail to you, who arose from the primeval waters
Lord of the lowlands, ruler of the desert edge,
Who crosses boundaries;
Mighty go, whose seizing cannot be seen,
Who lives on plunder,
Who goes upstream by his [own] perfection,
Who goes downstream, after hunting a multitude. . . '

Given the close affinity between the god and the crocodile, unsurprisingly Sobek's temples have yielded solid proof that crocodiles were kept in large numbers by the god's priests. Moreover, the animals were mummified and venerated after death. Several crocodile necropoleis, mainly dating to the Greco-Roman period, have been found in the Faiyum and Upper Egypt; at Kom Ombo crocodile mummies were discovered still in their clay coffins. The crocodile mummy shown here is honoured with the addition of a sun-disk to its head; this associates the creature with the composite deity Sobek-Re or Sobek-Hor-Haroeris, a strange composite solar-aquatic-fertility god (Wilkinson 1992: 105).

Remarkably, crocodile mummies have often been found alongside eggs and hatchlings. At al-Lahun, for instance, one crocodile mummy was accompanied by fifty tiny crocodiles which had newly hatched; they were lined up in two lines marching towards the head of the mummy. The crocodile necropolis at Hawara has yielded mummies of all sizes and recent discoveries at Medinet Madi has unearthed a nursery where eggs of the sacred reptiles were kept and allowed to hatch in a special building erected close to the Sobek temple (Bresciani 2005). The newborn crocodiles were reared in this area as well and were clearly permitted access to a water basin. While still young, the reptiles were then sacrificed, mummified and sold to the pilgrims who could then dedicate them to the god in the chapels of the necropolis. The site of Medinet Madi offers excellent evidence for a lucrative business in the breeding, slaughter and sale of reptiles to satisfy the mass-needs of a pilgrim-tourist industry which had developed rapidly throughout the Greco-Roman period.

4. A crocodile and its prey

Egyptian Old Kingdom tomb reliefs (after Houlihan 1996: 114; Evans 2010)



COMMENT: Hippopotamuses and crocodiles shared a similar habitat in the swamps of the Nile and the coast of the Levant. Crocodiles are absent from Levantine imagery (as are hippopotamuses), but both inspired the biblical monsters Leviathan (above no. 1) and Behemoth (HIPPOPOTAMUS no. 5). Because they shared a habitat, Egyptian artists, working closely from observation, often depicted them together and sometimes they showed the harsh realities of the two species living in the same space: eight Old Kingdom scenes represent crocodiles preying on pregnant hippos, opportunely waiting for them to calve and waiting patiently to snatch and devour the newborn infant.

This behaviour is not entirely typical of crocodiles, but it does show them at their opportunistic best. Crocodiles hunt alone or in a male–female pairing; they lurk submerged at the edge of lakes and rivers, waiting for thirsty animals to approach to drink. With their powerful jaws, they lunge at their prey, dragging them beneath the water to be drowned, after which they tear the victims apart, usually by clamping on to the carcass and spinning around wildly, thrashing about in powerful underwater gyrations. Dismembered chunks of flesh and bone are swallowed at the surface of the water.

Artists occasionally show crocodiles coming off worse in confrontation with hippos, as happens in real life. Some scenes, for instance, show powerful crocodiles ripped in two in the jaws of furious cow-hippos trying to protect their young (Vernus and Yoyotte 2005: 250–1).

5. The first classical account of the crocodile

Herodotus II.68–70

The nature of the crocodile is as follows. For the four months of winter it eats nothing. It is a four-footed creature which lives both on land and in the water: it lays its eggs and hatches them on land, and passes most of the day on the river bank, but spends its nights in the river, for the water is warmer than the night air and dew. Of all known creatures

it is the one which grows largest from the smallest size at birth; the eggs are not much bigger than a goose's and the hatchling is accordingly small, but it can grow to seventeen cubits or more. It has eyes like a pig's and large jagged teeth. It is the only animal that does not have a tongue. Its lower jaw does not move, and unlike other creatures it bites with the upper jaw onto the lower. It has strong claws and a scaly hide, impenetrable on its back. It is blind in the water, but very keen-sighted in air. Because it eats in the water it is plagued by leeches inside its mouth. Other birds and animals flee from it, but the *trochilos* is friendly with it, because it does the crocodile a service: whenever the crocodile comes out of the water onto land and gapes (it is in the habit of doing this facing the west) the *trochilos* hops into its mouth and picks out the leeches, and the crocodile enjoys receiving the service and never swallows the *trochilos*.

Crocodiles are sacred among some of the Egyptians, but not among others, who treat it as an enemy. The Egyptians who live at Thebes and Lake Moeris worship it particularly. They choose one crocodile and tend it, teaching it to be tame, putting earrings of glass and gold in its ears and bracelets round its forelimbs, giving it special food and sacred offerings, and tending it diligently as the most valued of beings. When the sacred crocodiles die they are mummified and buried in the necropolis. But the people of Elephantine in contrast eat crocodiles, not believing them to be sacred at all; they call them 'champsai' rather than 'crocodeiloi'. The latter is an Ionian word, since they thought that crocodiles were similar to the little lizards called 'crocodeiloi' which live in cracks in walls.

The Egyptians often hunt crocodiles in a number of different ways, and I will recount the one which seems to me most worth telling. The hunter baits a hook with the chine of a pig and casts it into the middle of the river; then he gets a young pig on the riverbank and beats it. The crocodile hears its squeals and following the sound, comes upon the bait and swallows it, and so it is caught and hauled in. When the hunter drags it up onto the land, the first thing he does is to plaster its eyes with mud; after this he can easily dispatch it, whereas without this it would be very difficult.

COMMENT: Herodotus' description of the crocodile, which underlies all later accounts in classical writers, is almost entirely accurate on its appearance, habits and role in Egyptian ritual. He exaggerates its size slightly, and is mistaken in respect of its jaws and tongue, but it is easy to see how the confusion could have arisen from the sight of a yawning crocodile on land. Even the claim that Egyptian sacred crocodiles were given gold or glass earrings, which may seem fanciful because crocodiles do not have external ears, is accurate: according to Lloyd (1976: 309) mummified crocodiles have been found at Thebes with holes for earrings bored into their skulls at the ear. The implication of this is that unlike the famously inaccurately described hippopotamus (see HIPPOPOTAMUS no. 6), the Greeks had a degree of familiarity with the crocodile before the fifth century BCE. It is difficult to pinpoint exactly when depictions in art or material remains became widespread: certainly the crocodile's appearance was known through imports of Egyptian and Phoenician art, and the skull of a five-metre Nile crocodile was found at the archaic Heraion on Samos (Boessneck and von den Driesch 1983).

The account of the sacred crocodile at Thebes marks the beginning of particular ancient interest in these tame animals: they became a tourist attraction at Arsinoe in Roman times, as shown by a papyrus letter from 112 BCE (*P.Oxy.* 1.33) which includes instructions for the visit of a Roman senator, L. Mummius, to see the crocodile(s) being fed, and by Strabo's account of his own visit to the same sight in the 20s BCE (*XVII.1.30*; Toynbee 2013: 219). The behaviour of the *trochilos*, the bird which cleans the crocodile's mouth, is well documented, although the precise

identity of the bird has been debated: Arnott (2007: 248–9) identifies it as the Egyptian Plover or the Spur-winged Lapwing.

6. The man-eating crocodile

Apulian red-figure rhyton, New York Metropolitan Museum of Art 55.11.3, from South Italy, 350–300 BCE (Rogers Fund 1955). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: Greek and South Italian *rhyta* in the form of animals are common (see DOG no. 15), but a series of fifth-century Attic *rhyta* from the workshop of Sotades depicts the unusual subject of a crocodile attacking a black youth. Nine examples exist, all made from the same mould and dating from c. 440 BCE, though the example here is not a Sotadean original, but a South Italian copy: Apulian potters made replicas of the design in the fourth century and a total of thirteen Italian copies are known. The preservation of this pot is poor, with the flared mouth of the cup broken at the top and the crocodile missing the end of its jaws and its back leg. The composition, however, is still clear: the crocodile curls energetically around the pot, seizing the youth's arm in its teeth and holding his body with its front legs: on the other side the youth grimaces in pain. Most of the Attic crocodiles are unpainted, but the spots and lines on this example are more fish-like than reptilian, and it has been given an inaccurate dorsal fin, no doubt reflecting the artist's

uncertainty about the details of the crocodile's anatomy. The meaning of the motif is debated (Hoffmann 1997: [ch. 1](#)), but it undoubtedly originates from Egyptian art depicting sacrifice to the crocodile god Sobek; Hoffmann suggests that its appearance in Attic art in the mid-fifth century reflects Athenian military involvement in Egypt (Thuc. I.104, 109–10), and mentions an intriguing historical fragment which suggests that a statue of Athena in a chariot drawn by crocodiles existed on the Acropolis (Hoffmann 1997: 32 n. 46). Localised interest does not, however, account for the popularity of the theme in fourth-century Italy, where it seems to relate to Nilotic paintings of pygmies seized by crocodiles (Versluys 2002: 265–7, 283–4 with illustrations).

7. Crocodiles in Gaul

Bronze dupondius, Nemausus, late first century BCE



Inscription: IMP DIVI F PP / COL NEM

COMMENT: The coins of Augustus from Rome depicting a lifelike crocodile with scaly hide are well known (Kitchell 2014: 40), but one of the largest issues of crocodile coins actually comes from the Roman colony of Nemausus (modern Nîmes) in southern Gaul. The coins, minted in very large quantities in the Augustan period, depict on the obverse a crocodile chained to a palm tree, with the identifying inscription COL(ONIA) NEM(AUSUS), and on the reverse the heads of Augustus and Agrippa. The crocodile of Nemausus is not as realistic as the Roman version: its skin is usually smoother, like a lizard, and its body rounded rather than flat, though it retains its impressive teeth. Its origin, however, is the same: Augustus granted the town of Nemausus the title of *colonia Augusta* in the 20s BCE, possibly settling some of his veteran soldiers there, and used it as a centre of coin production for the whole of the Western empire (Howgego et al. 2005: 173). The crocodile symbolises his conquest of Cleopatra and Mark Antony in Egypt, in an explicit metaphor of ‘taming’.

Augustus’ crocodiles were not the earliest to appear on Roman coins – crocodile mint marks are found on Republican coins, as are the hippopotamus and ibis (Meyboom 1995: Appdx 14) – but they are the first to form the primary image on the coin. A similar design was used in the 130s CE when Hadrian produced a series of *dupondii* depicting himself with his foot on a crocodile, the symbolism of which is more difficult to interpret since his visit to Egypt involved no conquest.

In the later empire the crocodile became regular as an accompaniment to the personified Nilus on coins of Marcus Aurelius (Vecchi and Vecchi-Gomez 2002). The image of the crocodile and palm tree remains on the coat of arms of Nîmes today.

8. Crocodiles in the arena

Symmachus Letters VI.43

SYMMACHUS TO THE SONS OF NICHOMACHUS

I have tried to keep the crocodiles which were exhibited in the theatre for you to see, but because they refused to eat and after fifty days were in very poor condition, they were killed in the second set of games in the usual way at public spectacles. I have kept the only two which are still alive to await your arrival, but their continued refusal of food means that they cannot live much longer.

COMMENT: Symmachus, a senator and *praefectus urbi* in the fourth century CE, documents in his *Letters* his efforts to organise games with animal shows and *venationes* in support of his son's political career, during his quaestorship in 393 and praetorship in 401. He imported many kinds of animals from across the empire, but indicates that crocodiles were a particular attraction for the crowd at Rome (IX.141), no doubt because they were infrequently seen, given the trials of capturing and transporting them. The crocodiles described here were exhibited at the praetorian games, and would indeed have been an unusual sight: the first recorded crocodiles in Rome were the five shown by Scaurus in 58 BCE (Plin. *NH* VIII.96), but we hear of them only twice subsequently, at Augustus' games of 2 BCE, when a display of crocodile-hunting took place (Dio LIII.27.6; Str. XVII.1.44), and under Antoninus Pius soon after Hadrian's visit to Egypt (SHA *AP* 10.9).

As Symmachus' experience shows, crocodiles were not well suited to being kept in captivity: to thrive they require not only sufficient space with suitable access to water, but a constant warm temperature, shade and cover (Bolton 1989). As reptiles they can go for considerable periods without eating, so cannot be managed by withholding food, and they are extremely difficult to handle. The third-century CE emperor Elagabalus is said to have had a crocodile among his menagerie of Egyptian animals (SHA *Elag.* 28.3), but one cannot imagine that it lived for long.

Bibliography

- W.G. Arnott, *Birds in the Ancient World from A to Z* (London 2007).
J. Boessneck and A. von den Driesch, 'Weitere reste exotischer Tiere aus dem Heraion auf Samos', *MDAI* 98 (1983), 21–4.
M. Bolton, *The Management of Crocodiles in Captivity* (FAO Conservation Guide 22) (Rome 1989).
E. Bresciani, 'Sobek, Lord of the land of the lake', in S. Ikram (ed.), *Divine Creatures: animal mummies in ancient Egypt* (Cairo 2005).
D. Clines, *Job 38–42* (Atlanta 2011).
L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010).
R.K. Gibson, *Ovid: Ars Amatoria Book 3* (Cambridge 2002).
H. Hoffmann, *Sotades: symbols of immortality on Greek vases* (Oxford 1997).
P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
C. Howgego, V. Heuchert and A. Burnett (eds), *Coinage and Identity in the Roman Provinces* (Oxford 2005).
O. Keel, *Dieu répond à Job* (Paris 1993).
K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).

- T.O. Lambdin, 'Another cuneiform transcription of Egyptian *msh*, "Crocodile"', *Journal of Near Eastern Studies* 12.4 (1953), 284–5.
- M. Lichtheim, *Ancient Egyptian Literature: Volume II. The New Kingdom* (Berkeley 1973).
- M. Lichtheim, *Ancient Egyptian Literature: Volume III. The Late Period* (Berkeley 1980).
- A.B. Lloyd, *Herodotus Book II* (Leiden 1975–88).
- P.G.P. Meyboom, *The Nile Mosaic of Palestrina: early evidence of Egyptian religion in Italy* (Leiden 1995).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- I. Vecchi and J. Vecchi-Gomez, 'Of crocodiles and coins: Roman Egypt personified', *Minerva* 13.3 (2002), 51–3.
- P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
- M.J. Versluys, *Aegyptica Romana. Nilotic Scenes and the Roman Views of Egypt* (Leiden 2002).
- R.H. Wilkinson, *Reading Egyptian Art* (London 1992).
- D. Wylie, *Crocodile* (London 2013).

TORTOISE/TURTLE

Chelonians (turtles and tortoises) are among the world's oldest reptiles: a remnant of the age of the dinosaurs, they have evolved surprisingly little in over 200 million years. Their most distinctive feature is their hard shell (carapace) which affords them protection and camouflage from predators; they use their strong sharp jaws to cut and chew their food, since they have no teeth. The term 'turtle' has traditionally been reserved for marine species, although zoologists sometimes now use it to refer to the species as a whole; terrestrial species are known as tortoises, while those which inhabit fresh water are called terrapins. All three kinds were known to ancient cultures, chiefly river turtles in Mesopotamia and Egypt, along with African land tortoises. Pliny lists four kinds of *testudo* in his *Natural History* (XXXII.32): the land tortoise, the sea turtle, the river turtle and the turtle which lives in muddy water; we recognise them as the tortoise, sea turtle and terrapin.

Attitudes towards chelonians, however, show one of the greatest dislocations between ancient and modern views. Near Eastern and Egyptian cultures abhorred the turtle, considering it an unpleasant and ill-omened animal. The Egyptians did not even distinguish between the soft-shelled Nilotic turtle (*Trionyx triunguis*) and the many species of land tortoise, classifying both as 'fish'; they were regularly eaten and their shells used for decorative containers and as the sound-boards of musical instruments. There are, however, no representations of tortoises, nor literary mentions of them, in Egypt before the Greco-Roman period (Wilson 2015). Greeks and Romans, while not as wholeheartedly hostile to chelonians as Eastern civilisations, were nevertheless dismissive towards them. Zoological writers understood tortoise and turtle anatomy and nesting behaviour (Ar. *HA* 558a 3–13; Pausanias I.44.8; Pliny *NH* IX.37), and (as with all animals) tall tales existed of giant specimens found in India, the shells of which were so large that they could be used to roof houses, or as boats (Diod. III.21; Pliny *NH* IX.35). But the native tortoise and turtle are surprisingly little discussed: there are no sources describing them in their habitat, and they were neither eaten nor considered as pests. A modest number of terracotta votive tortoises (and turtles) have been found in ancient sanctuaries, but it is difficult to see a link between the tortoise and any specific deity (Bevan 1988). By far the most emphasis is placed on the products which could be derived from chelonians: whole shells for lyres (below no. 6), decorative tortoiseshell and medical remedies. Discussion of tortoiseshell, used as an inlay in furniture, is extensive (*NH* IX.39, XVI.233; Juv. XI.93–5; Dumoulin 1994: 25–6).

But in general attitudes towards ancient tortoises were very different from the affection in which they are held in modern times: they must have browsed on the mountains of Greek islands and

swum in the rivers, but ancient writers seem largely blind to them. Such attitudes were not, however, universal: Dumoulin illustrates a beautiful gold necklace from Vani in Georgia, to the north of Greece, made in the fifth century BCE, which has thirty-one exquisite tortoise pendants (1994: fig. 60, and online at www.fitzmuseum.cam.ac.uk/gallery/goldenfleece/explore/graves.html).

1. Ninurta and the turtle

Sumerian literary composition (after Alster 1972)

Enki fashioned a turtle from the clay of Abzu. At the entrance at the gate of Abzu, he placed it. Enki spoke to him (= Ninurta) at the ambush. He brought him to the place where the turtle was. The turtle behind him caught him in the ankle. It turned its feet away from Hero Ninurta. Enki like an ignorant one said: 'What is this?' With its claws it scratched in the earth and dug a pitfall. Hero Ninurta fell down into it. While it ignored the hero (saying): 'Let [me] get out!' the turtle scratched . . . [. . .] . . . Great Lord Enki spoke to him: 'After yo[u] found [my(?)] divine functions which had been . . . from . . . since you then set your face against me in order to murder me . . . a boasting . . . I set up, I . . . You who thus set your face against me, your position, what (luck) did it provide to you, its account, what is it like? What success did your strength have? Where is your heroism? In all the great mountains he caused destruction, but now what profit for him did it result in?' This matter was revealed to Ninmenna. She tore her outer garment and ran as a stranger (saying): 'To you, my Ukuku, whom shall I send to you? Men will shake their head (saying): "Let it not last!" Whom shall I send to you? . . . You, (whose) verdict of death is merciless, whom shall I send to you?'

COMMENTARY: The turtle has a fiendish reputation in Mesopotamian sources where it is, without fail, an image of ferocity, cunning and cruelty (see further below). Fischer (1968: 5) suggests that some of this aversion may be based on fact: river-turtles are carnivorous, can grow to a surprisingly large size (more than a metre in diameter) and would have been seen to attack waterbirds and their nests.

In this remarkable Sumerian composition, the turtle sets itself against the god Ninurta and becomes the deity's nemesis; it burrows into the earth, creating potholes into which the god stumbles, and scratches the god's skin with its sharp claws. In fact the turtle's flipper-like foot, ending in claws, was an unpleasant image in Mesopotamian eyes. A series of Assyrian and Babylonian birth-oracles (Jastrow 1914: 35–6) include the following observations on infant deformities:

If a woman gives birth, and the right foot [of the child] is like that of a turtle, the enemy will destroy the property of the land.

If a woman gives birth, and hands and feet are like those of a turtle, the ruler will destroy the product of his land.

Medical texts also use the turtle as a negative symbol and a jaundiced individual is said to have 'spittle as yellow-green as a turtle'; in other words, the turtle is 'bile-coloured' (Chicago Assyrian Dictionary s.v. *šeleppû*). Nevertheless, turtle meat was often consumed: Akkadian funerary offering lists include mention of turtle-flesh and women approaching child-birth were recommended turtle meat to encourage an easy labour. Eating the head of a turtle was a guarantee against greying hair and a turtle's penis made into a poultice with herbs could prevent male nocturnal emissions (Chicago Assyrian Dictionary s.v. *raqqu*, *ruqqētu*). A series of Akkadian oracles suggest that

it was inauspicious to see turtles in an urban setting, which may suggest why turtles and tortoises were represented on Babylonian boundary stelai (*kudurru*), often in the company of other feared talismanic creatures, such as scorpions, snakes, lizards, jackals, wolves and monstrous hybrids (King 1912; Slanski 2003; Young 2003: 76).

2. The heron and the turtle

Sumerian fable (after Gragg 1973)

What do they say in the reed-beds whose growth is good? In the wide reed-beds of Tutub, whose growth is good? In the marshes of Kiritaba, whose growth is good? In the *adara* thickets of Akcak, whose growth is good? In Enki's interconnecting (?) lagoons, whose growth is good? In the smaller lagoon, Enki's lagoon, whose growth is good? In Enki's *barbar* reeds, whose growth is good? In the little *zi* reeds of Urim, whose growth is good? In Urim, where cows and calves abound, whose growth is good?

At that time, the water was drained away from the reeds . . . , and they were visible at the sheepfold. The *actaltal* plant, spreading its seeds from the reed-beds, and the little *kumul* plants came out of the earth: they are good as little ones. The small *enbar* reed grooms her hair: it is good as a young maiden. The *ubzal* reed goes about the city: it is good as a young man. The *pela* reed is covered from bottom to top: it is a good daughter-in-law. The *pela* reed turns from bottom to top: it is a good young son. The *gacam* reed digs in the ground: it is good as an old man. The *zi* reed . . . on its own: it is good as an old woman. The reed-bed lifts its head beautifully: it is a good Gudea. The *ildag* tree lifts its head in the irrigation ditch: it is good as a king. . . . with bright branches: it is a good prince.

On that day, beside the reed-beds, someone sitting on the bank prays: 'Let me snatch away the heron's eggs, let me take them away . . . , so that the gift-bringing bird will not be able to make a gift, so that the gift-bringing heron will not be able make a gift!' [. . .]

It catches fish; it collects eggs and crushes them. It crushes the *suhur* carp in the honey plants. It crushes the *ectub* carp in the little *zi* reeds. It crushes toads in the *ligiligi* grass. It crushes fish spawn, its offspring, its family. It strikes heron's eggs and smashes them in the sea.

The gift-giving bird made a plea; the heron entered the house of king Enki and spoke to him: 'Give me . . . a wide-open place to lay my eggs in.' He gave her . . . , and did . . . for her . . . is indeed . . .

1 line fragmentary

She laid eggs in the . . . She laid eggs in the wide reed-beds of Tutub. She laid eggs in the marshes of Kiritaba. She laid eggs in the *adara* thickets of Akcak. She laid eggs in Enki's interconnecting (?) lagoons. She laid eggs in the smaller lagoon, the lagoon of Eridug. She laid eggs in Enki's *barbar* reeds. She laid eggs in the little *zi* reeds of Urim. She laid eggs in Urim, where cows and calves abound.

Then the quarrelsome turtle, he of the troublesome way, said: 'I am going to pick a quarrel with the heron, the heron! I, the turtle, am going to pick a quarrel with the heron! I, whose eyes are snake's eyes, am going to pick a quarrel! I, whose mouth is a snake's mouth, am going to pick a quarrel! I, whose tongue is a snake's tongue, am going to pick a quarrel! I, whose bite is a puppy's bite, am going to pick a quarrel! With my slender hands and slender feet, I am going to pick a quarrel! I, the turtle – an oven

brick – am going to pick a quarrel! I, who live in the vegetable gardens, am going to pick a quarrel! I, who like a digging tool spend my time in the mud, am going to pick a quarrel! I, an unwashed refuse-basket, am going to pick a quarrel!’

The turtle, the trapper of birds, the setter of nets, overthrew the heron’s construction of reeds for her, turned her nest upside down, and tipped her children into the water. The turtle scratched the dark-eyed bird’s forehead with its claws, so that her breast was covered in blood from it.

The heron cried out and grew pale: ‘If I, a bird, . . . my empty nest and . . . Let my king judge my case, and give me a verdict! Let Enki judge my case, and give me a verdict! May the lord of Eridug . . . my claim.’

A second time, may the gift-bringing bird not be able to make a gift, may the gift-bringing heron not be able to make a gift! It (*the turtle*) catches fish; it collects eggs and crushes them. It crushes the *suhur* carp in the honey plants. It crushes the *ectub* carp in the little *zi* reeds. It crushes toads in the *ligiligi* grass. It crushes fish spawn, its offspring, its family.

It dug in the ground, . . . its head upwards. . . She (*the heron*) cried out to king Enki: ‘My king, you gave me the wide reed-beds, and I laid eggs there. I laid eggs in the wide reed-beds of Tutub. I laid eggs in the marshes of Kiritaba. I laid eggs in the *adara* thickets of Akcak. I laid eggs in Enki’s interconnecting (?) lagoons. I laid eggs in the smaller lagoon, the lagoon of Eridug. I laid eggs in Enki’s *barbar* reeds. I laid eggs in the little *zi* reeds of Urim. I laid eggs in Urim, where cows and calves abound.

‘Then the quarrelsome turtle, he of the troublesome way, he whose eyes are snake’s eyes, he of the troublesome way, he whose mouth is a snake’s mouth, he of the troublesome way, he whose tongue is a snake’s tongue, he of the troublesome way, he whose bite is a puppy’s bite, he of the troublesome way, he with the slender hands and slender feet, the turtle – an oven brick – he of the troublesome way, he who lives in the vegetable gardens, he of the troublesome way, he who like a digging tool spends his time in the mud, he of the troublesome way, an unwashed refuse-basket, he of the troublesome way, the turtle, the trapper of birds, the setter of nets, overthrew my heron’s construction of reeds.

‘He turned my nest upside down, and tipped my children into the water. The turtle scratched my forehead – me, the dark-eyed bird – with its claws, so that my breast was covered with my blood.’

The prince called to his minister, Isimud: ‘My minister, Isimud, my Sweet Name of Heaven!’ ‘I stand at Enki’s service! What is your wish?’

‘First . . . is filtered on the left (?) side, then a copper box is made, so that . . . is covered. Then you tie . . ., and you tie the top with string . . .; then you . . . with a piece of dough, and you irrigate the outer enclosure (?); and you put . . . (?) Enki’s interconnecting (?) lagoons. Then let him sit . . .

1 line missing

1 line fragmentary

Isimud . . . paid attention. First he filtered . . . holy water, then he made a copper box and covered . . . Then he tied the top with string . . .; then he . . . with a piece of dough, and he irrigated the outer enclosure (?); and he . . . (?) Enki’s interconnecting (?) lagoons. (Enki speaks:) ‘Then I, the prince, will make . . . stand . . .’

The turtle called to the prince: ‘You are a prince! She [. . .] [. . .] from fire. I am not a god; . . .

1 line fragmentary

King Enki . . . You are a prince! She . . . My heart . . . You are a prince! She . . . your word. My little one destroyed a wall . . .; she . . . You are a prince! You are [. . .] [. . .] brickwork.

16 lines missing

Your flax (?) is single

1 line unclear

Your . . . is single; [. . .] [. . .] the hero . . . Your seed is single [. . .] [. . .] a tall tree. My strong copper [. . .] [. . .] good semen . . .

Then, on the ziggurat . . . King Enki was . . . on the ziggurat. The great brickwork of the ziggurat . . . the *abzu*; the brickwork of the *abzu* . . . He took dirt from his fingernail and created the *dingi* vegetable. He made the *dingi* . . . in the ground. Your flax came out of the earth . . . He watered the little ones with his hand; he watered the big ones with his foot. The flax grew large. After the flax had grown tall, after he had bound (?) it . . .

1 line fragmentary

6 lines missing

The king . . .

1 line fragmentary

1 line missing

3 lines fragmentary

They seized . . . for him. They . . . for him. They confronted (?) . . . in the desert.

1 line unclear

. . . , they laid out the hunting net . . . did not catch; he caught in (?) the hunting net, . . . did not catch; he spread out the hunting net.

5 lines fragmentary

. . . of Enki

1 line fragmentary

May you be . . . ; may you be . . . ; may you be . . . ; may you be . . .

unknown no. of lines missing

SEGMENT B

2 lines fragmentary

. . . of Enki. . . did not catch; . . . the hunting net. The turtle . . . Enki . . . something from his fingernail. Its inside is five . . . ; its exterior is ten . . . A crevice . . .

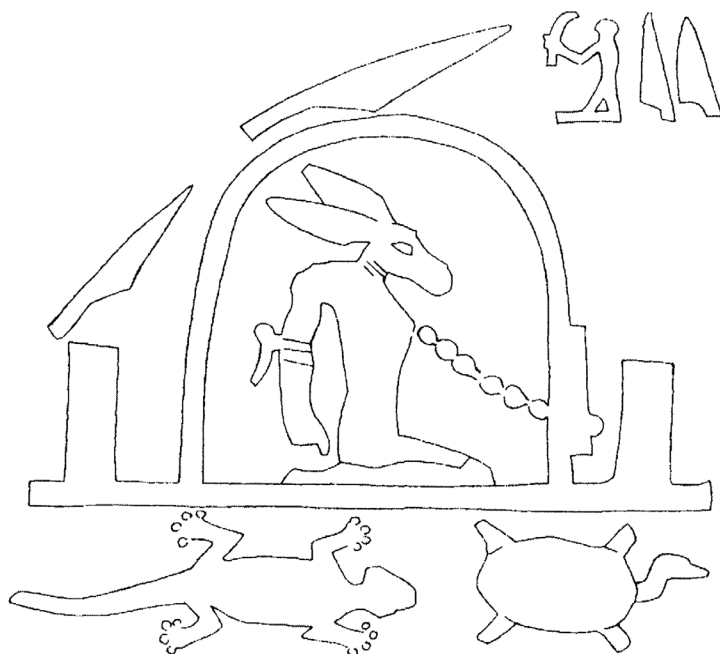
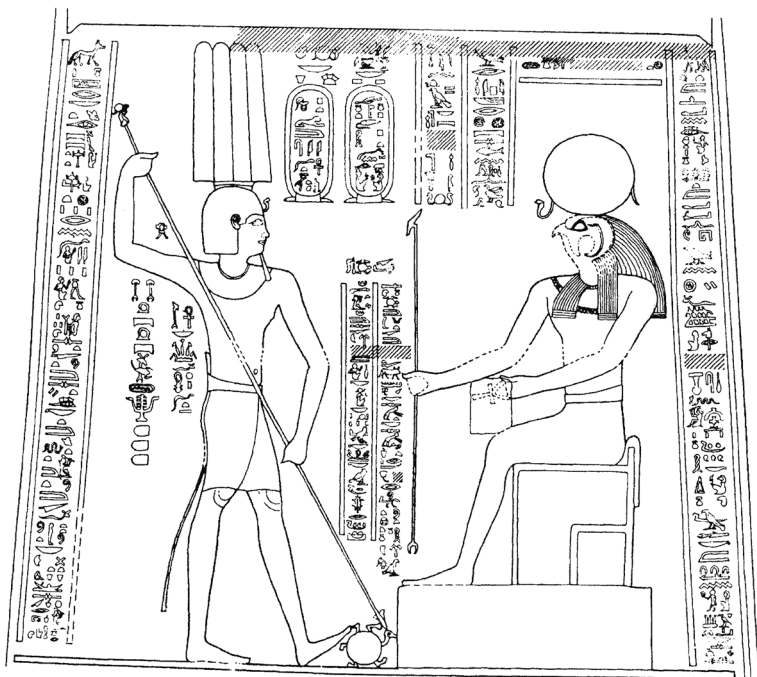
unknown no. of lines missing

COMMENT: This Sumerian fable is found on a four-column tablet excavated at Nippur. It tells the story of a quarrel between a heron and a turtle and since it cannot be classified as a 'debate' (a popular genre in Mesopotamian literature), it is best to regard this text as a fable. The climax of the fable is regrettably unclear since the tablet breaks badly at the end; the final section seems to concern the turtle alone, with no mention of the heron, and a story in which Enki creates a vegetable (and hence flax) from the dirt beneath his fingernails (see further Black et al. 2004: 235–40).

Both the turtle and the heron are portrayed as having human characters, and once again the turtle is depicted as ruthless and merciless. It overturns the heron's carefully built nest and scatters her fledglings into the mud before cutting the bird's head with its claws. In spite of the human characterisations of the bird and the turtle, their behaviours are, of course, based on the natural actions of living animals. River turtles tend to seek out birds' nests and do indeed devour both chicks and adult birds. That the Sumerians observed the living habits of the animals and created a richly descriptive fable around them is not at all surprising.

3. The slaughter of the turtle

Egyptian reliefs, Ptolemaic and New Kingdom temple scenes



COMMENT: In Egypt the turtle's name (*stw*) was written as 'the mysterious one' (*st3*), alluding to the fact that the river turtle is one of the Nile's most furtive animals, able to retract its limbs completely into its carapace. It has a long double-tubed nose which it uses as a snorkel and is thus able to remain submerged for many hours. Moreover, its nocturnal lifestyle gave it a sense of mystery. It is no wonder that the turtle entered into Egyptian mythology with negative connections.

The turtle was regarded as the supreme enemy of the sun god Re, and was treated as an abomination (Fischer 1968: 8). It was often shown in the company of the chaotic deity Seth, or (as here) next to the image of a bound and restrained Seth, suggesting the vanquishing of chaos, which the turtle helped to emphasise.

In a literary account known as the *Slaughter of the Turtle* the pharaoh, taking on the guise of Onuris, a hunter god and the bearer of the skies, spears a turtle in the presence of Re, and in Late Period and Ptolemaic temple reliefs (as above) this cosmically important act is depicted. Throughout the New Kingdom, coffin texts included magical formulas such as 'Re shall live, the turtle shall die', while in the Book of the Dead the scribal god Thoth incites a spell to activate the generative power of the sun god:

*Behold, with strength I force
my access to the sundisk . . .
Truly, Re lives!
The turtle is dead.*

A wooden statue of a turtle-headed demon or guardian spirit was discovered in the tomb of Horemheb (Wilson 2015: 55) and while its name remains unknown, its fearsome aspect stresses the fact that for the Egyptians the turtle was a creature to be feared and despised.

4. Nile turtles mating?

*Line drawing taken from the Old Kingdom tomb
of Hay at Saqqara (after Evans 2010: 162)*



COMMENT: This scene purportedly shows mating Nile turtles in an underwater marsh scene. Naturalistic depictions of turtles are not at all common in Egyptian art; their nocturnal and aquatic lifestyle was not conducive to easy observation, which may explain the error in this depiction. Evans (2010: 165) notes that in their natural environment the male turtle does not stand upon the female during mating but achieves intromission while he swims with her. This action was unlikely to have been witnessed often (or understood) by the Egyptians and so the artist used the mating behaviour of terrestrial tortoises as a model for supposed turtle-behaviour.

5. The land tortoise and the sea turtle

Silver staters, Aegina, (a) 480–57 BCE (b) 380–60 BCE
(photograph © The Colosseo Collection)



COMMENT: The island of Aegina, off the coast of Attica, was one of the first Greek *poleis* to begin minting coins in the sixth century BCE, and the silver staters or ‘turtles’ of Aegina were one of the most widespread and trusted archaic currencies (Sheedy 2012: 107). Early coins carry what is clearly a sea turtle as their symbol: the creature has a smooth shell and flippers, and is likely to be the loggerhead turtle (*Caretta caretta*). Many *poleis* chose animals as their sigil on coinage – see OWL, BEAR, CRAB – but beyond its obvious maritime associations the Aeginetan choice of the turtle is difficult to account for, as the island was not known as a haunt of turtles.

Around 445 BCE the symbol on Aeginetan coins changes to a land tortoise with segmented shell (most likely the spur-thighed tortoise, *Testudo graeca*), a design which continued into the fourth century BCE: the example above shows both the detail of the design and the very high relief which allows the tortoise to stand out from the coin. Older studies of Greek coinage traditionally interpreted the change from turtle to tortoise as a symbolic reflection of the loss of Aeginetan sea power after defeat by Athens in 457, but this view is now outdated: more recent studies have shown that some tortoise coins were minted at the same time as the earlier turtles, and Figueira (1998: 116–27) suggests that they may simply have been a method of distinguishing the coins produced by two different mints. Sheedy (2012: 106–9) suggests that as the turtle coins became worn from their wide circulation the new design of the tortoise may have been intended to distinguish the new issues clearly. The tortoise remained the distinctive symbol of Aegina until the end of its independent coin issues in the second century BCE.

6. The proverbial tortoise

Greek Anthology XI.436 (*Lucian*)

You would sooner find a white crow or a flying tortoise
Than a decent orator from Cappadocia.

Symphosius Aenigmata 20

I am sluggish, slow of pace, gifted with a beautiful back,
Learned, too, yet destined for a cruel fate.
While I lived I never spoke, but now I am dead I sing.

COMMENT: It is easy to think of tortoise-stories from antiquity: the fable of the tortoise and the hare (Aesop 226 Perry), for instance, or the philosophical paradox of Zeno's tortoise, which can never be overtaken by a fleet-footed Achilles (Ar. *Phys.* 239b 14–18; Plut. *Mor.* 1082e). The tortoise was at the centre of a group of proverbial sayings generated by its particular qualities – its slowness, silence and heavy shell – and apart from the tortoise and hare, few stories show those qualities in a positive light. The 'flying tortoise' became proverbial (like our flying pigs) not just as an impossibility, but in a fable (Aesop 230 Perry) which sees the tortoise wish to fly, but instead fall to her death as a punishment for her presumption. It is also the subject of a series of rather macabre riddles about the creation of the lyre, the stringed instrument which used a tortoise shell as sounding board. These riddles begin with the *Homeric Hymn to Hermes* (25–48), in which the god finds the tortoise and kills her to create the first lyre, and they take on a regular form contrasting the silent living creature with the sweet music produced once it is dead (Soph. *Ichn.* 299–312; *GA* XIV.30; Cic. *De div.* II.133). It is true to say that the tortoise, source of both lyres and decorative tortoiseshell, was valued far more dead than alive.

Bibliography

- B. Alster, 'Ninurta and the turtle', *Journal of Cuneiform Studies* 24 (1972), 120–5.
E. Bevan, 'Ancient deities and tortoise-representations in sanctuaries', *ABSA* 83 (1988), 1–6.
J. Black, G. Cunningham, E. Robson and G. Zólyomi, *The Literature of Ancient Sumer* (Oxford 2004).
K. Bradley, 'The sentimental education of the Roman child: the role of pet-keeping', *Latomus* 57 (1998), 523–57.
D. Dumoulin, *Antike Schildkröten* (Würzburg 1994).
L. Evans, *Animal Behaviour in Egyptian Art* (Warminster 2010).
T.J. Figueira, *The Power of Money: coinage and politics in the Athenian Empire* (Philadelphia 1998).
H. Fischer, *Ancient Egyptian Representations of Turtles* (New York 1968).
G. Gragg, 'The fable of the heron and the turtle', *Archiv für Orientforschung* 24 (1973), 51–72.
M. Jastrow, *Babylonian-Assyrian Birth-Omens and their Cultural Significance* (Munich 1914).
L.W. King, *Babylonian Boundary-Stones and Memorial Tablets in the British Museum* (London 1912).
K. Sheedy, 'Aegina, the Cyclades and Crete', in W.E. Metcalf (ed.), *The Oxford Handbook of Greek and Roman Coinage* (Oxford 2012), 105–27.
K. Slanski, *The Babylonian Entitlement Naris: a study in form and function* (Boston 2003).
H. Wilson, 'Tortoise or turtle?' *Ancient Egypt* 16.3 (2015), 52–5.
P. Young, *Tortoise* (London 2003).

FROG/TOAD

Frogs and toads are amphibious, needing water to breed, but they do not necessarily live only in damp places; many Mediterranean species have adapted to arid environments, including tree frogs and midwife toads. Indeed the distinction between a frog and a toad is largely one of habitat and appearance, 'frog' being applied to smooth-skinned and aquatic species, and 'toad' to land-dwelling species with warty skin. Frogs are among the earliest animals to be attested in Near Eastern antiquity. They are first found represented as amulets in the Predynastic Period in Egypt, while in Mesopotamia talismanic frogs were carved from haematite and steatite from at least the third millennium BCE. In spite of their widespread popularity in the ancient Near Eastern artistic sphere, artists did not necessarily aim for naturalism or accuracy in their depictions of these omnipresent amphibians. Notorious for their croaking calls and their ability to reproduce extensively, frogs were, unsurprisingly, connected to Near Eastern notions of divination and fertility. Frogspawn in particular had a resonance with ideas about regeneration, and in Egypt the hieroglyph of a tadpole stood for the number 100,000 (Wilkinson 1992: 107). Images of frogs appear alongside much more fearsome animals on Egyptian Middle Kingdom ivory wands or birthing tusks, and throughout the Near East frogs decorated objects as spouts, implying their close connection with purification. Frogs even appear as a symbol of Christian resurrection in the Coptic period in Egypt, when terracotta lamps often bear their images (Desroches Noblecourt 2007: 56).

In classical antiquity frogs were known for two things: their noisy croaking and their bright colour. *Batrachis*, 'frog-green', reflecting the vivid colour of the Pool Frog (*Pelophylax lessonae*) and Tree Frog (*Hyla arborea*), is used to describe clothes (Ar. *Kn.* 1406, *IG II*² 1514.16–17), gemstones (Pliny *NH* XXXVII.10) and horse-racing colours (Dio LIX.14). Little distinction was made between species of frog even among scientific writers, though some refer to tree-frogs as well as those of marsh and river (Theoc. *Id.* VII.139). While frogs could be annoying, attitudes towards them were generally positive: Plato famously described the civilisations of the ancient Mediterranean as 'frogs around a pond' (*Phaedo* 191b). Toads, on the other hand, commanded no such affection: their secretive habits and unattractive appearance led them to be characterised as uncanny and poisonous creatures. Both frogs and toads figure extensively in ancient medicine (Pliny *NH* XXXII). Frogs in classical art are comparatively rare: one or two Italian frog-shaped lamps are known (e.g. *CVA* Cleveland pl. 100.4–5), and they sometimes appear as background to Roman Nilotic wall-paintings (see HIPPOPOTAMUS no. 8). The only form in which they are numerous, however, is the Roman garden statue, where their amphibious nature made them suitable for fountain sculptures (Bodson 2001: 330–1).

1. The plague of frogs

Hebrew bible, Exodus 8:1–12

Then the Lord said to Moses, 'Go to Pharaoh and say to him, "This is what the Lord says: Let my people go, so that they may worship me. If you refuse to let them go, I will send a plague of frogs on your whole country. The Nile will teem with frogs. They will come up into your palace and your bedroom and onto your bed, into the houses of your officials and on your people, and into your ovens and kneading troughs. The frogs will come up on you and your people and all your officials."'

Then the Lord said to Moses, 'Tell Aaron, "Stretch out your hand with your staff over the streams and canals and ponds, and make frogs come up on the land of Egypt."'

So Aaron stretched out his hand over the waters of Egypt, and the frogs came up and covered the land. But the magicians did the same things by their secret arts; they also made frogs come up on the land of Egypt.

Pharaoh summoned Moses and Aaron and said, 'Pray to the Lord to take the frogs away from me and my people, and I will let your people go to offer sacrifices to the Lord.'

Moses said to Pharaoh, 'I leave to you the honour of setting the time for me to pray for you and your officials and your people that you and your houses may be rid of the frogs, except for those that remain in the Nile.'

'Tomorrow,' Pharaoh said.

Moses replied, 'It will be as you say, so that you may know there is no one like the Lord our God. The frogs will leave you and your houses, your officials and your people; they will remain only in the Nile.'

After Moses and Aaron left Pharaoh, Moses cried out to the Lord about the frogs he had brought on Pharaoh. And the Lord did what Moses asked. The frogs died in the houses, in the courtyards and in the fields. They were piled into heaps, and the land reeked of them. But when Pharaoh saw that there was relief, he hardened his heart and would not listen to Moses and Aaron, just as the Lord had said.

COMMENT: The only mention of frogs in the Hebrew bible occurs in connection with the second plague in Egypt (see also Psalms 78: 45 and 105: 30). Although numerous species of frog were to be found in the marshes of Egypt and the Near East, the most common was *Rana esculenta*, the edible green frog, sometimes known as the river frog because of its propensity to stay in the water throughout the year, not just at the breeding season.

If we wish to look for a natural explanation for the plague of frogs then we must realise that in connection with the ancient annual inundation of the Nile, frogs (Hebrew *šēpardēa*) were known to invade the land from the marshy banks of the river, usually in September and October (Hort 1957: 95). Hort dates the occurrence of the second plague seven days after the waters had been infected by the first plague in which the river turned to blood (i.e., the churning up of the red earth of the river bed polluted the clear waters of the Nile), showing the close relationship between the two plagues. The pollution of the Nile caused the frogs to leave the river and to dwell on land. The sudden death of the frogs (Exodus 8:13) is attributed to their being contaminated by *bacillus anthracis*, which is found along the banks of the Nile and may have come from the decomposing fish (Hort 1957: 97).

Some of the plagues, however, can be explained through the lens of Egyptian religious beliefs: the plagues are attacks on Egyptian gods themselves. After all, Exodus 12: 12 states, 'I will bring judgement on all the gods of Egypt.' The Nile, the sacred vital artery of the country, was personified as the god Hapi, and the river's annual inundation was regarded as a manifestation of Osiris, god of rebirth. The first two plagues which centred on the river could have been understood by the Egyptians as nullifying the powers of these two deities. Moreover, the plague of frogs could well have been taken as mocking the frog goddess Heqt, who was integral in assisting women in labour and who was the consort of Khnum, the one who fashioned human beings out of the clay of the earth. The Egyptians did not necessarily associate the common river frog with Heqt, however. So what is the symbolic meaning of the plagues? Simply this: the Pharaoh and the gods of the Egyptian pantheon are unable to maintain order over the forces of nature when faced with the power of Yahweh. The cumulative effect of the story of the plagues on Egypt is to demonstrate the biblical narrator's familiarity with Egyptian culture.

2. Frog-song of rebirth

A New Kingdom hymn to the Nile-god Hapi (after Foster 1995: 119)

The lotus flowers which have arisen out of the flood proclaim the joy.
All the reptiles are happy because of the event.
[All the] creepy-crawlies skip around.
Those living in holes in the ground relive their childhood.
The frogs croak.
Their faces are bright, they begin rejoicing.
The whole land has become green.

COMMENT: Hapi, the personification of the inundating Nile, was a figure of exuberant joy for the Egyptians and they expressed their gratitude and thanks to him with numerous lively hymns and songs, some of which reach back to the Old Kingdom. Pyramid Text 581, for instance, tells of the ‘meadows laughing when the riverbanks are flooded’ and in the Middle Kingdom a great hymn to the Nile was composed which told of the joyful reactions of the people who witnessed the annual miracle of flood. The text was still being copied as a masterpiece of literature in the Late Period (Lichtheim 1975: 204–9). This particular hymn dates to the New Kingdom and may have been composed at the accession of Pharaoh Merenptah to the throne.

The frog was known by many names in Egypt, but by the New Kingdom the most common word for ‘frog’ was the onomatopoeic *kerker*, representing the creature’s croak. As an animal that had the ability to transform itself and emerge, apparently in a new state of being, from the mud of the river (see no. 8 below), the frog was associated with life-giving forces – the four male gods who ruled the universe before the creation of the world were frog-headed. During the New Kingdom and the Late Period the frog hieroglyph was used to write the expression *wekhem ankh* (‘repeating life’; the symbolism was still being used in Coptic Christianity), so it is no coincidence that this Nilotic hymn gives prominence to the frogs as they welcome the rebirth of the land with their chorus of croaks and calls.

3. The frog as a symbol of rebirth

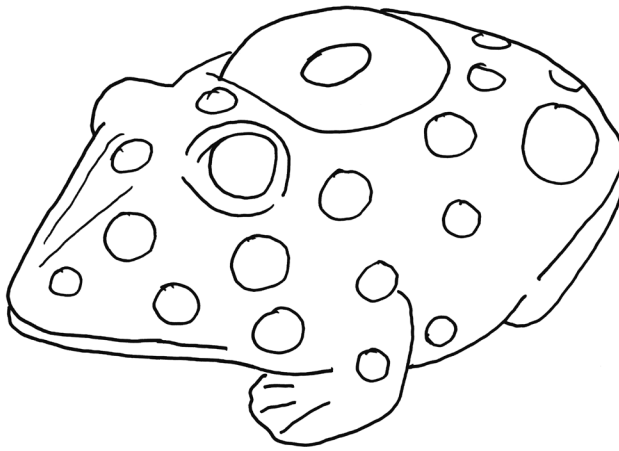
Line drawing of a relief from the temple of Isis at Philae, c. 30 BCE (after Desroches Noblecourt 2007: 56)



COMMENT: Heqt, the frog-goddess, was the female counterpart of the god Khnum, the ram-headed creator of humankind. She was usually represented in zoomorphic form (as here) where she is closely associated with the legend of the murder and rebirth of Osiris. Here she is evoked as the goddess of childbirth and she oversees the impregnation of Isis (represented in avian form as a kite) as she lowers herself onto the penis of her resurrected husband. Heqt guarantees the renewal of life. Because of her association with the Osiris myth, Heqt was worshipped in many of the god's cult centres, including his main temple at Abydos, where the pharaoh Seti I is depicted praying to her for a fortunate afterlife (Desroches Noblecourt 2007: 55). Likewise, in one painted wall scene in the tomb of Nefertari, the Great Royal Wife of Ramses II, the queen is shown in the company of a diminutive green frog, a symbol of her eagerness to obtain a happy resurrection (Desroches Noblecourt 2007: 56).

4. Frog statuette

*Stone carved frog from Uruk, Iraq, c. 3300–3000 BCE
(London, British Museum 1929,0603.1)*



COMMENT: This comical but elegant little statuette of frog, made from a dark grey slate-like stone, has a large hole for a post placed in its back with numerous other shallow drill holes placed over the body which were originally inlaid with coloured stones that were meant to represent the shiny and colourful skin of a real frog.

The frog was a familiar symbol in early Mesopotamian art and literature. Sumerian proverbs frequently use frogs as figures of fun, and their croaking in particular resonated with the Sumerians: 'The frog, its voice befits the marshes', reads one memorable maxim (Alster 1997 (1): 151). Frogs were regular figures in mythology too: one story tells how the goddess Ishtar loved Ishullanu, a gardener who offered her fruit, but was taken aback when she revealed herself to him naked; annoyed at his coy behaviour, she turned him into a frog. Another myth records that the goddess stole the powers of the god Enki after he had fallen asleep, drunk on beer. Waking with a headache, Enki commanded the frogs, because of their connection with the underworld and divination, to seek out his stolen powers and return them to him (Werness 2006: 189). Frogs also appear on old Babylonian seals found at Susa (see Merrillees 2005: 134–5, fig. 82).

5. A frog takes away evil

Akkadian magical text (after Scurlock 2002: 373)

He catches a green frog in the water. On the same day that he captured it, in his bed, in the morning before he puts his foot on the ground, you ru[b him] from head to foot and you (sic) say as follows: ‘Frog, you know the “grain” that seized me, [but I do not know it]. Frog, [you know] the *li’bu* that seized me [but I do not know it]. When you (try to) hop off and return to your waters, you will return [the evil to] its steppe.’ You have [him] say this three times [and] three times he spits into its mouth. You take it to the steppe and you tie its foot with a band of red and white wool [and you fas]ten it to a *baltu* [or *dsagu*-thorn].

COMMENT: In Near Eastern thought animals were frequently used as magical scape-goats and handling a living animal was a way of getting rid of one’s sickness or ‘evil’ as, acting like a sponge, it soaked up the human’s distress (see DUCK no. 2). In this text human spit is used as a conduit for the patient’s evil spirit; the live frog is rubbed and spat at as incantations are recited and then tagged with wool and thorns and set free, thereby taking the evil with it.

6. The chorus of frogs

Aristophanes Frogs 205–68

Charon: It’s easy. As soon as you take your first stroke, you’ll hear some wonderful songs.

Dionysus: Whose songs?

Charon: From the marvellous Frog-Swans.

Dionysus: Start me off, then.

Charon: Aaand . . . in-out, in-out.

Frogs: Brekekekex-koax-koax, brekekekex-koax-koax. Children of the watery marshes, let us send forth our hymn with the *aulos*, that sweet song of ours – *koax-koax* – which we chanted in the Marshes for Dionysus, Nysaian son of Zeus, when the drunken crowd of revellers came to our sanctuary on the day of the Chutroi. Brekekekex-koax-koax.

Dionysus: My arse is beginning to ache, *koax-koax*.

Frogs: Brekekekex-koax-koax,

Dionysus: Though a fat lot you care.

Frogs: Brekekekex-koax-koax.

Dionysus: Oh, to hell with your *koax*-ing; you’re nothing but ‘*koax-koax*’.

Frogs: Well naturally, you busybody; for we are loved by the Muses skilled in lyre-playing, and by goat-footed Pan, ever playing on his pipe of reeds; and phorminx-playing Apollo cherishes us still more, for the sake of the underwater reeds for the lyre’s bridge which we cultivate in the marshes.

Dionysus: I’ve got blisters on my hands, and my arse is sweating as before; soon it will peep out and make its own ‘brekekekex-koax-koax’. But, you tuneless frogs, please do shut up.

Frogs: No, rather we will sing, if ever on sunny days we sprang about through the galin-gale and tufted reeds, taking delight in the verses of our song as we dived, or, fleeing Zeus’ rain we sang our watery chorus from the depths, bubbling joyfully upwards.

Frogs and Dionysus (together): Brekekekex-koax-koax.

Dionysus: I shall take over this croaking from you.

Frogs: That's a terrible thing to do to us.

Dionysus: I will do worse, if I row until I burst apart.

Frogs and Dionysus (together): *Brekekekex-koax-koax*.

Dionysus: Go to hell: I don't care.

Frogs: We will go on shouting all day long, as much as our throats can stand.

Frogs and Dionysus (together): *Brekekekex-koax-koax*.

Dionysus: You won't beat me.

Frogs: No, you won't beat us.

Dionysus: No, you won't beat me ever, for I shall shout all day if necessary, until I've vanquished your 'koax'. *Brekekekex-koax-koax*.

[silence]

There, I thought I'd put an end to your 'koax'.

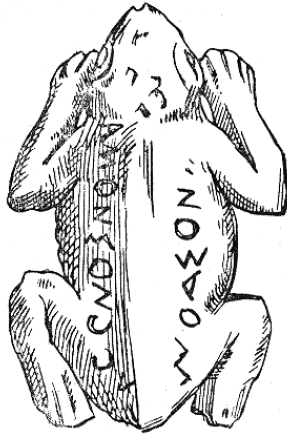
COMMENT: Aristophanes' chorus of noisy frogs appears at the start of his play, as the god Dionysus rows his way across the Lake of Acheron to reach the Underworld: they sing their own praises and attempt to put Dionysus off his stroke, until he manages to defeat them in a shouting-match. Although the play takes its name from this scene, the frog chorus vanishes after this single memorable episode. The aspect of frog behaviour at issue here is their incessant croaking, which many authors bewail; the poet Horace complained of a sleepless night thanks to frogs and gnats on his journey to Brundisium in 37 BCE (Hor. *Sat.* I.5.14–15); the frogs here, however, present themselves as delightful songsters who have a special relationship with the gods of music. While their claim to share in musical ability because they tend the reeds of which instruments are made is a nonsensical one, Aristophanes has a great deal of fun with their song, coining the onomatopoeic '*brekekekex-koax-koax*' to represent their croak, and including tongue-twisting invented words to describe their bubbling and splashing. A long-standing debate exists over whether the frogs were represented on stage or merely sang offstage (Rothwell 2007: 136–7), but given that two other comic plays called *Frogs* had earlier put the amphibians on stage, the theatrical possibilities of costume and action just seem too tempting.

7. A votive frog

a) Greek Anthology VI.43 (Plato)

The servant of the Nymphs, lover of dampness, moist singer,
The frog which takes delight in flowing water,
A traveller moulded in bronze and dedicated here
After quenching his fierce thirst in the blazing heat;
For as he wandered the frog guided him to water
With a timely croak of its amphibian mouth from the watery hollow.
The traveller, not forsaking the guiding voice,
Found the draught of sweet water he longed for.

b) Bronze votive frog from the Peloponnese (after Rouse 1902: fig. 35)



COMMENT: This third-century BCE epigram from the *Greek Anthology* describes the dedication of a bronze votive frog to the Nymphs by a grateful traveller, and the picture illustrates just such a votive offering, found at a shrine in the Peloponnese. It carries the inscription ‘Anion, son of Sonoos, to Boason’, probably a local deity. Frogs were, according to Bevan, rare among animal votives, with only about twenty examples known, and were most often dedicated to female deities at watery shrines (Bevan 1986: 152). Real frogs were certainly present at the sanctuary of Leto at Xanthus, and Ovid tells the story of how they came to be there, transformed by the goddess herself from the unfriendly peasants (*Met.* 6.313–81). While some have tried to see the frog as a prophetic creature linked with Apollo, Bevan suggests rather that they evoked ideas of moisture and fertility, and were thus dedicated as votives to deities such as Artemis and Leto.

8. Tadpoles

Pliny Natural History IX.159

Frogs mate by covering, the male grasping the female’s armpits with his front feet and her hindquarters with his hind feet. They bring forth tiny black lumps of flesh which are called tadpoles and which have only eyes and a tail; soon, however, they grow feet, their tail splitting in two to form the hind legs. Remarkably, after six months of life they dissolve again into the mud and vanish, and in the spring are reborn in the water in the same form, for some unknown reason of nature, since it happens every year.

COMMENT: Both Pliny and Ovid (*Met.* XV.375–8) describe the way that tadpoles are born without legs and subsequently grow them, although as with many small creatures, the process of metamorphosis was not fully understood – the tadpole grows legs separately from its tail, which it gradually reabsorbs – nor the frogs’ winter hibernation. There is also some confusion with the idea that frogs are spontaneously generated from the mud at the pond’s bottom (as in Ovid’s account), though Aristotle makes one passing mention of frogspawn (*HA* 568a22). But the tadpole was recognised as an intermediate form between egg and frog, and is used occasionally to symbolise an incomplete and juvenile creature (Plato *Tht.* 161d).

9. The poisonous toad

Aelian On the Nature of Animals XVII.12

I hear that there is a species of toad which is dangerous to drink and harmful to look upon. In drink it is poisonous if someone grinds it up and gives the blood to the victim to drink, putting it with evil intent either into wine or some other drink of the kind that these accursed sorcerers think suitable for mixing with the blood. It brings a death which is not long drawn-out, but immediate. This toad is also dangerous to look at; if anyone sees it and looks at it with a keen gaze, and the toad, as is its nature, stares back at him boldly and breathes out its natural breath (which is harmful to human skin), that person will turn pale, so much so that a stranger meeting him for the first time would think that he was looking at a sick man. The pallor lasts for a few days, then vanishes.

COMMENT: Both Greeks and Romans were completely convinced that the toad, the larger land-dwelling relative of the frog, was poisonous. Lurid tales abound of its ability to kill by touch or breath – Pliny describes it as full of many different poisons (*NH* VIII.110) – or even by such distant contamination as drinking from a vessel from which a toad has drunk (*NH* XI.280). It was thus logically used as a component in poisons (Juv. *Sat.* I.70), and also in magic spells: the *Geoponica* (II.18.14) includes a fertility charm which involves carrying a toad in an earthenware container around the field at night, and then burying it in the middle of the field until sowing-time, and Pliny (XVIII.303) says that one can protect the grain in a barn by hanging up a toad by its hind leg at the threshold. Oddly, despite such negative associations, the Greek term for a toad, *phryne*, appears as the ‘stage name’ of several *hetairai* in the fourth century; Mnesarete was reputedly the most beautiful woman of her day, but was nicknamed Phryne because of her yellow complexion (Athen. 590c–e; Plut. *Mor.* 401a).

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
 E. Bevan, *Representations of Animals in Sanctuaries of Artemis and Other Olympian Deities* (Oxford 1986).
 L. Bodson, ‘Amphibians and reptiles: evidence from wall paintings, mosaics, sculpture, skeletal remains and ancient authors’, in W. F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 327–56.
 C. Desroches Noblecourt, *Gifts from the Pharaohs: how Egyptian civilization shaped the modern world* (London 2007).
 J. Foster, *Egyptian Love Songs of the New Kingdom* (Austin 1995).
 G. Hort, ‘The plagues of Egypt’, *ZAW* 69 (1957), 84–103.
 G. Hort, ‘The plagues of Egypt’, *ZAW* 70 (1958), 48–59.
 M. Lichtheim, *Ancient Egyptian Literature: the Old and Middle Kingdoms* (Berkeley 1975).
 P.H. Merrillees, *Catalogue of the Western Asiatic Seals in the British Museum* (London 2005).
 J. Neils and G. Walberg, *Corpus Vasorum Antiquorum. The Cleveland Museum of Art* Fasc. 2 (Princeton 2000).
 K.S. Rothwell Jr., *Nature, Culture and the Origins of Greek Comedy: a study of animal choruses* (Cambridge 2007).
 W.H.D. Rouse, *Greek Votive Offerings* (Cambridge 1902).
 J. Scurlock, ‘Animals in ancient Mesopotamian religion’, in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 361–403.
 C. Sleight, *Frog* (London 2012).
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 H.B. Werness, *The Continuum Encyclopaedia of Animal Symbolism* (New York 2006).
 R.H. Wilkinson, *Reading Egyptian Art* (London 1992).

LIZARD

Lizards and geckoes are numerous and characteristic inhabitants of the Middle East and the Mediterranean: they occupy all kinds of habitat, but readily live alongside people, making their homes in stone walls and buildings. Perhaps because they were so common, there is surprisingly little discussion in ancient texts of their distinctive characteristics – their quickness, bright colours and habit of basking in the sun. They are more often found as background detail in ancient art, and were evidently ubiquitous: as well as the proverbs discovered in the Hebrew bible and Aristophanes passage below, we find Cicero in the first century BCE commenting that it is normal to find lizards in one's house (*De Div.* II.62), and Augustine in the fourth century describing how he becomes distracted when sitting at home by watching a lizard catch flies (*Conf.* X.35.57).

While Egyptian has one generic word for 'lizard' (below no. 2), the Akkadian language has a rich lizard vocabulary – *andūhallatu*, *birbarrānu*, *ḥulmiṭtu*, *kallat šēri* and *šurāru* – although it is very difficult to pin down exact species of lizard from this wide-ranging lexicon. A gecko was known as a *ḥumbābītu*, while a chameleon was known as *ajar ili*. In Greek the general term for a lizard was *sauros* and in Latin *lacerta*, but several specific types were distinguished: the gecko (*ascalabotes* or *galeotes*), the green lizard and the *stellio* or spotted lizard. Considerable confusion surrounds this last animal: Pliny (*NH* XIX.90) identifies it with the gecko, and says correctly that it is harmless, but also that it is not found in Italy; other Latin writers, however, present the *stellio* as a venomous native creature (e.g. Col. *De agri.* IX.7.5). Given that the spotted colour is its most salient feature, it is likely that the name is applied to a range of different modern species. Zoological writers also knew of the chameleon, discussed at length by Aristotle (very accurately, though the passage (*HA* 503a 15–b 20) may be a later addition to the text). Pliny devotes several chapters of his *Natural History* (XIX.112–18) to relating the chameleon's magical properties, apparently drawn from Democritus' work *On the Power and Nature of the Chameleon* (Gell. X.12.1), despite saying that he believes none of it. There are also references to the semi-mythical salamander, popularly supposed to be immune to fire (Ael. *NA* II.31; Nic. *Th.* 818–21).

Perhaps the greatest attention is paid to lizards by Roman writers on farming, who saw them as a particular threat to domestic bees: Columella advises that beehives should have two or three entrances for the bees, because if there is just one a cunning lizard will stand at the entrance with its mouth open and swallow the bees as they emerge (IX.7.6).

1. Lizard maxims

a) Akkadian Vassal Treaty of Esarhaddon 83

May your flesh, the flesh of your women, your
brothers, your sons and daughters be . . . like the
flesh of a chameleon.

b) Sumerian poem (after Kramer 1956: 331)

You are in pain,
I am troubled by it.
I am struck dumb, I gaze at the stars,
The new moon shines white on my face:
Your bones will be arrayed on the wall,
The 'man of the wall' will shed tears for you,

The keeners will pluck lyres for you,
The gecko will gash the cheek for you,
The fly will pluck the beard for you,
The lizard will bite its tongue for you. . .

c) Hebrew bible, Proverbs 30.28

A house gecko can be caught with the hand, yet it is found in kings' palaces.

COMMENT: Lizards enter into a wide range of ancient Near Eastern texts, ranging from medical recipes for skin and eye diseases to magical incantations for warding off evil sorceresses. Dream interpretations and omen texts frequently draw on lizard behaviour as a means of explanation of actions and consequences. Curses use lizard-images too: the Neo-Assyrian curse above calls for the flesh of the cursed to become (seemingly) old, dry and wrinkled like that of a chameleon while the Sumerian poem is a woman's sad lament over the illness of her son; she pictures his dead body being mourned by professionals and picked over by insects, geckos and lizards. The Hebrew proverb, on the other hand, has a more positive association: the lizard is a unique little creature and arouses a sense of respect. The tiny house gecko has more freedom to enter into the halls of royal palaces than most human beings have. The contrast between the tiny reptile and the lofty palace has a neat rhetorical effect.

2. Lizard-based magic and medicine

a) Late Period Egyptian demotic medicinal recipes

You put a two-tailed lizard into the oil and [cook] it, and anoint the man with it; then [he dies (?)].

You wish to produce a skin-disease on a man and that it shall not be healed, a *hantous*-lizard [and (?)] a *haflecle*-lizard, you cook them with [oil (?)], you wash the man with them.

b) Ebers Papyrus 469

Another (remedy): Black lizard, it shall be crushed . . . it shall be boiled in oil. One shall anoint therewith.

COMMENT: In Egypt all lizards and geckos shared a common hieroglyph (^ⲙⲩⲥ) and were not necessarily distinguished in either literature or art as being different species. It is probable though that term *hnꜥsw* was actually commonly used by the Egyptians to refer to the gecko and the demotic spell cited here clearly attempts to distinguish lizard types.

While lizards are mostly harmless in daily life, as ingredients in magico-medical spells they were thought to be deadly (as indeed in popular contemporary Egyptian folklore: Hansen 2003). Tomb scenes often show lizards being held as a threatening gesture by protective spirits who use them to ward off threats to the deceased such as necrophagic insects. In spite of their common usage in popular magic, very few lizards have been found preserved in tombs, although at Roman-period Lisht hundreds of monitor lizards have been discovered interred in jars (Pinch 1995: 80). Lizards have highly active mucus glands and the mucus was used in treating coughs and chest-infections. Indeed, one satiric demotic papyrus notes that a person suffering from a blocked nose is 'under a lizard's spell' (Vernus and Yoyotte 2005: 336).

3. The gecko on the roof

Aristophanes Clouds 169–74

Student: Why, just yesterday Socrates was robbed of a great idea by a gecko.

Strepsiades: How on earth did that happen? Do tell.

Student: Socrates was studying the path of the moon in its circuit, gazing up at the night sky with open mouth – and a gecko up on the roof crapped on him.

Strepsiades: Oh, that's brilliant: a gecko crapped on Socrates!

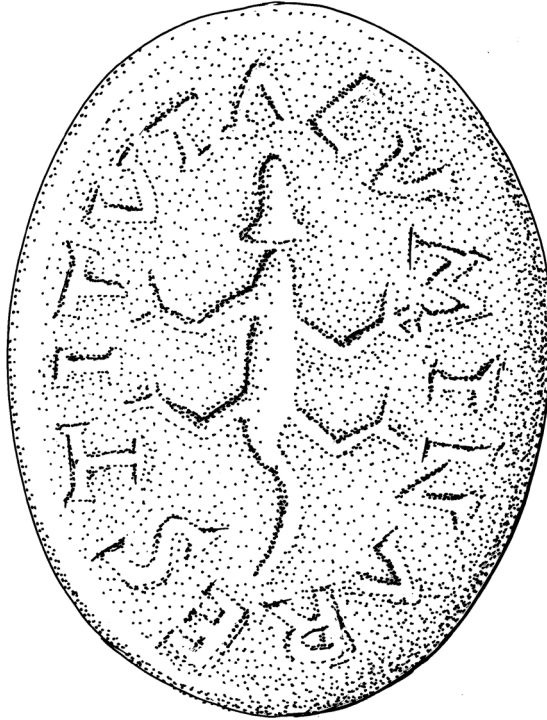
COMMENT: This is one of a series of incidents in the *Clouds* in which Socrates' experiments are ridiculed (see FLEA no. 1), but it is telling for the implication that a gecko climbing around houses after dark was an expected phenomenon. The gecko has hooked pads on its toes which allow it to cling to walls and ceilings as it hunts for insects, and it is largely nocturnal. Many of the illustrations in early Greek vase-paintings that represent climbing lizards actually depict geckoes, as for instance on the Late Corinthian Amphiareus krater, where the spots and characteristic round toes can clearly be seen (Hurwit 2006: fig. 9). Pliny says that geckoes are like chameleons in that they live on dew and spiders (NH XI.19), and also reports the persistent belief, originating with Theophrastus, that the gecko's cast slough will cure epilepsy, but that the gecko out of spite eats the slough to prevent humans benefitting from it (VIII.111). In an obvious example of sympathetic magic a *stellio* drowned in wine is said to create a potion to cause spots on the complexion, and Pliny claims (XXIX.73) that women add extract of *stellio* to the face cream used by their rivals.

4. Green lizards in medicine

a) Pliny Natural History XIX.129–30

Lizards are used in a number of ways to treat diseases of the eye. Some shut up a lizard in a new earthenware pot, together with the little stones known as *cinaedia*, which are also used as amulets against swellings in the groin; they seal the pot with nine seals and remove one seal every day. On the ninth day they free the lizard, and the stones are used as treatment for eye pains. Another method is to put a layer of earth into a glass vessel, and a green lizard which has had its eyes put out, and to close it up together with rings of slid iron or gold. When it can be seen through the glass that the lizard has regained its sight it is let go, and the rings used against inflammation of the eyes. Others use the ash of a lizard's head to cure the scab in place of antimony. The long-necked green lizard which lives in sandy places can be burnt and applied in an ointment to treat the onset of fluxes and also cataracts.

**b) Nicolo gem, Berlin Staatliche Museen, Antikensammlungen
FG8340 (drawing by Tessa Rickards)**



COMMENT: Lizards are quite frequently referred to as components of Roman medicine, and Gaillard-Seax (1998) demonstrates that a particular affinity was supposed between the green lizard and diseases of the eye. The remedy given above exists in four different ancient sources: Pliny, Aelian (*NA* V.47), the Cyranides and the fifth-century CE medical writer Marcellus. All agree on the main elements, and Aelian presents the spell as though he has actually seen it performed. Belief in the regenerative power of the lizard was strong: it was known that a lizard can shed its tail to avoid capture and regrow it (*Ar. HA* 508b 7–8; *Plin, NH* XI.264), and some extended this to the claim that if cut in half the animal could rejoin and heal (*Ael. NA* II.23). The blinding of the lizard was thus performed in the belief that the creature's eyes would regrow and the healing power would be imparted to the stones. The gem above, dedicated as a thank-offering, bears witness to the practical application of the spell: its inscription carries the meaning 'eyesight restored', and it depicts the lizard as healing agent.

As well as their general availability, another reason for the employment of lizards in magic is their vaguely human appearance which allowed them to function as effigies: the fourth-century CE Roman orator Libanius recounts the story of how he began to suffer from migraine and gout, making him unable to practise his trade and bringing him to a point of extreme depression; soon after he found an effigy that had been placed in his lecture-room to cast a binding-spell – a dead chameleon which had been bound with its head between its hind legs, and one forelimb covering its mouth. Once the chameleon was removed, Libanius recovered his health (I.243–50).

5. Lizards in art

*Attic black-figure cup, Berlin, Schloss Charlottenberg
F1806, c. 540 BCE, attr. Nikosthenes (drawing after
Walters 1905; some reconstruction of scene)*



COMMENT: Lizards are common in art from Greece and the Roman empire, as one might expect: they appear on Greek vases – on the cup above two long spotted lizards are among the wild animals surrounding the ploughing scene – and in Roman wall-painting and sculpture, though rarely as a subject in themselves: they are background details, on walls or among branches. Here, for instance, the lizards indicate the margins of the cultivated land, where wild creatures replace domestic. This should simply be a reflection of the natural environment, but the lizard has been the subject of particular analysis in several contexts. Hurwit (2006), for example, argues that the lizards which often appear as filling ornament on archaic Greek pots are symbols of ill-omen, while Toynbee suggests that on Roman *cippi* they refer to the idea of resurrection (2013: 220–1). Singling the lizard out in the way that Hurwit does, however, seems unsatisfactory: many of the lizards on Greek pots appear among other creatures such as birds, and Hurwit admits that there are plenty of vases where lizards do not seem to carry any overtones, positive or negative.

Sorabella (2007), in contrast, argues that the lizards which accompany sleeping Erotes in Roman sculpture are not symbolic animals, but actual playthings of the idealised child. While lizards are not named among ancient pets there are indications that children would catch them to play with, rather cruelly suspending them from strings: Sorabella illustrates a mosaic from North Africa showing Dionysus with a lizard on a string (fig. 9.11), and the practice is referred to in a late source, the *Carmina Tria de Mensis* (365). She suggests further that the famous Apollo Sauroktonos statue, described by Pliny (NH XXXIV.70), may have depicted the young Apollo either seeking to catch a lizard, or with one already caught.

Bibliography

- L. Bodson, 'Amphibians and reptiles: evidence from wall paintings, mosaics, sculpture, skeletal remains and ancient authors', in W. F. Jashemski and F. G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 327–56.
P. Gaillard-Seux, 'Les maladies des yeux et le lézard vert', in A. Debru and G. Sabbah (eds), *Nommer la maladie. Recherches sur le lexique gréco-latin de la pathologie* (Saint-Étienne 1998), 93–105.

- N.B. Hansen, 'Leaping lizards! Poison geckos in ancient and modern Egypt', in n.a. *Egyptology at the Dawn of the Twenty-First Century 2* (Cairo 2003), 290–8.
- J.M. Hurwit, 'Lizards, lions and the uncanny in early Greek art', *Hesperia* 75 (2006), 121–36.
- S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
- A. Mastrocinque, 'Le gemme votive', in J.-P. Brun (ed.), *Artisanats antiques d'Italie et de Gaule. Mélanges offerts à Maria Francesca Buonaiuto* (Naples 2009), 53–65.
- I. Opelt, 'Eidechse', *Reallexikon für Antike und Christentum* IV (1959), 763–71.
- G. Pinch, *Magic in Ancient Egypt* (Austin 1995).
- J. Sorabella, 'Children, animals and Roman funerary sculpture', in A. Cohen and J.B. Rutter (eds), *Constructions of Childhood in Ancient Greece and Italy* (Princeton 2007), 353–70.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
- H.B. Walters, *History of Ancient Pottery, Greek, Etruscan and Roman* (London 1905).

SNAKE

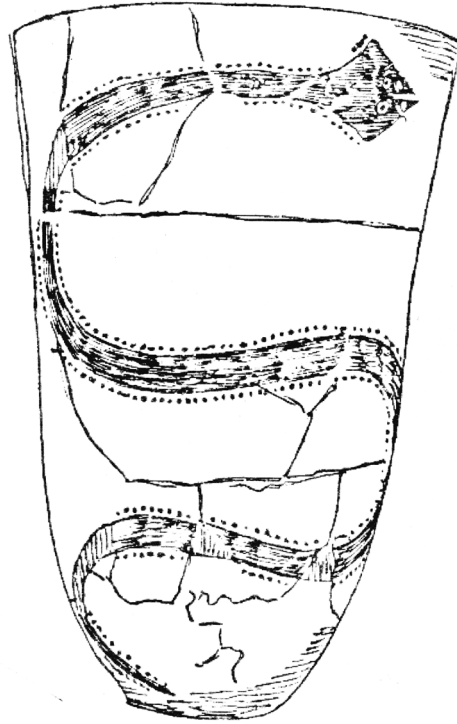
Snakes have colonised every continent except Antarctica, and live in all kinds of habitat, from deserts and grasslands to marshes and forests, and including marine species. All are carnivorous, but only a minority of species are venomous. Attitudes towards snakes reveal some interesting cultural divergences. In many modern societies snakes are the object of exaggerated fear, and this was also the case in ancient Near Eastern societies, where texts abound with fearful references to killer snakes. Some (though not all) of the forty or so species of snake (Hebrew *nāḥāš*, Akkadian *bašmu* (etc.)) which inhabited the region were deadly poisonous, influencing the attitudes to all (for good cultural overviews see Wilson 2001; Stutesman 2005; Charlesworth 2010). In Europe, however, where poisonous snakes were rare – Greece and the Italian peninsula are home to about twenty snake species, of which only the viper (*echidna*) is poisonous – the snake (Greek *ophis*, Latin *serpens*, *anguis*) was seen as a useful creature because it preyed on rodents, and it was a familiar inhabitant of villages and farms. Indeed snakes were frequently tamed as pets, and also lived as sacred creatures in sanctuaries.

By and large, snakes are relatively small and shy animals, but they occupied a significant place in the ancient imagination: because of their unusual characteristics – large unblinking eyes, ability to shed their skin and tendency to appear suddenly from the ground – they were seen as connected with the spirit world. Stories abound of huge, supernatural snakes (e.g. the Egyptian Apophis serpent, the great adversary of the sun god; see also Virg. *Aen.* II.201–27, V. 84–99) and snakes were represented as guardians to the household (Orr 2001) or protectors of communities (below no. 3). Images of snakes appear in huge numbers in Near Eastern, Egyptian, Greek and Roman art, appearing in wall- and vase-paintings, sculpture and jewellery, yet almost all are depictions of symbolic or mythological snakes, rather than identifiable living creatures.

Classical writers and readers were evidently fascinated by the fearsome snakes to be encountered in the East, from the vast pythons of India which were supposed to be large enough to fight elephants, to the venomous cobras and other species of Africa (below no. 5). The cobra, as an Egyptian snake, was well known, and its battle with the mongoose is a staple of Nilotic paintings (see MONGOOSE no. 3 and HIPPOPOTAMUS no. 9). Herodotus even claimed to have seen the remains of winged snakes from Arabia (II.75–6. III.107–9). Exotic snakes were often exhibited: Diodorus (III. 36–7) gives an extensive account of the capture of a thirty-cubit snake in Ethiopia for Ptolemy II's menagerie, and Augustus is said to have exhibited a fifty-cubit snake received as a gift from India (see RHINOCEROS no. 4).

1. Side-winding vipers from Susa

***Painted terracotta beaker from Susa (Shush), Iran,
Susa I period, c. 4000 BCE (Paris, Louvre Sb 3168)***



COMMENT: This beaker is decorated with a striking minimalist image of two fearful-looking snakes. Root (2002: 175) describes them thus:

displayed in vivid side-winding locomotion, with small dots running up each side along their entire length (as if to reinforce the sense of movement) and with diamond-shaped heads poised for action, they command the convex surface of the vessel in a dramatic composition . . . as if depicting two male snakes rearing up for imminent mating-season battle (a common activity among vipers).

Indeed, archaeologists believe that this is an image of *Echis carinatus*, a side-winding, saw-scaled viper still found in Iran, the Near East and North Africa. It can be up to three feet long and has a particularly toxic venom (Root 2002: 176). Prehistoric Susian seals frequently show such snakes coiled together in pairs; occasionally one is shown devouring animal, or even human, prey. Several similar dedicatory pots, clearly part of burials, were discovered at Susa. In fact, a beaker similar to this was interred next to an infant buried at Susa, while shards of vessels with a single snake on each side were found at nearby burial sites (Algaze 1989). It is possible that the cutting of the beaker near the vessel's top, at the snakes' heads, was deliberate; the intention might have been to create a detachable top, which would 'decapitate' the serpents.

The snake was important in the art and ideology of ancient Elam and was particularly connected to the cults of the gods Inshushinak and Napirisha. There is reason to believe that the snake's body linked it to the movement of water in streams, and cultic symbols in which the pouring of water and the writhing of snakes are contrasted are known (on the importance of the snake in Elamite society see Spycket 1992: 28–9). Remarkably the snake-image disappears from Iran in the Achaemenid period, possibly because of the (proto-) Zoroastrian belief that snakes were agents of darkness (Moazami 2005).

2. Divine curses on the snake

a) Hebrew bible, Genesis 3.1–15

Now the serpent was more crafty than any of the wild animals the Lord God had made. He said to the woman, 'Did God really say, "You must not eat from any tree in the garden"?"

The woman said to the serpent, 'We may eat fruit from the trees in the garden, but God did say, "You must not eat fruit from the tree that is in the middle of the garden, and you must not touch it, or you will die."'

'You will not certainly die,' the serpent said to the woman. 'For God knows that when you eat from it your eyes will be opened, and you will be like God, knowing good and evil.'

When the woman saw that the fruit of the tree was good for food and pleasing to the eye, and also desirable for gaining wisdom, she took some and ate it. She also gave some to her husband, who was with her, and he ate it. Then the eyes of both of them were opened, and they realized they were naked; so they sewed fig leaves together and made coverings for themselves.

Then the man and his wife heard the sound of the Lord God as he was walking in the garden in the cool of the day, and they hid from the Lord God among the trees of the garden. But the Lord God called to the man, 'Where are you?'

He answered, 'I heard you in the garden, and I was afraid because I was naked; so I hid.'

And he said, 'Who told you that you were naked? Have you eaten from the tree that I commanded you not to eat from?'

The man said, 'The woman you put here with me—she gave me some fruit from the tree, and I ate it.'

Then the Lord God said to the woman, 'What is this you have done?'

The woman said, 'The serpent deceived me, and I ate.'

So the Lord God said to the serpent, 'Because you have done this,

'Cursed are you above all livestock
and all wild animals!

You will crawl on your belly
and you will eat dust
all the days of your life.

And I will put enmity
between you and the woman,
and between your offspring and hers;
he will crush your head,
and you will strike his heel.'

b) Egyptian Pyramid Text 378

Oh snake in the sky! Oh centipede on earth! The Sandal of Horus is what tramples the *nhi*-snake under-foot . . . It is dangerous for me so I have trodden on you; be wise about me and I will not tread on you, for you are the mysterious and invisible one of whom the gods speak; because you are the one that has no legs, because you are the one that has no arms, with which you could walk after your brethren the gods . . . beware of me and I will beware of you.

c) Egyptian Pyramid Texts 388, 230 and 237

Horus has shattered [the snake's] mouth with the sole of his foot. . .
May your poison fangs be in the earth, your ribs in your hole. . .
[May you leave your] spittle in the dust.

COMMENT: The infamous account in Genesis of the serpent in the Garden of Eden picks up a familiar folkloric motif in which the snake (Hebrew *nāḥāš*) has been the enemy of humankind since time immemorial (see discussions in Wenham 1987: 72–9; Zevit 2013: 192–205; George and George 2014: 177–214). Snakes are the sworn enemies of all humans, lying in wait for them at the roadside, in stone walls, caves or in homes (Genesis 49.17; Amos 5.19; Isaiah 11.8). In Hebrew thought all snakes were poisonous (Deuteronomy 32.25, 33; Jeremiah 8.17; Psalms 57.5), although it was commonly assumed that it was their forked tongue and not their fangs that carried the venom and, therefore, wickedness is symbolised as a serpent's poison: 'His food in his bowels turns into asps' venom within him' (Job 20.44; see further Proverbs 23.29–35, 30.18–20; and Forti 2008).

The serpent of Genesis draws on a widespread Near Eastern image of the snake as a repository of ancient wisdom and as the bringer of death (which occurs in the Hebrew bible after mankind's expulsion from Eden). In Mesopotamia, Ningishzida is a serpent-shaped guardian of demons who lives in the underworld and has knowledge over life and death; the image is found in Egypt, too, in the form of the subterranean god Apophis. Many primeval gods were worshipped in serpent form: Geb, the Egyptian earth-deity, could adopt a snake's head and 'the serpent who created the earth' was honoured at Karnak. It would be quite wrong to assume, therefore, that the serpent in the Garden of Eden was demonic. It is certainly not to be thought of as an incarnation of Satan, an idea that only developed, albeit swiftly, in the Christian tradition (Charlesworth 2010).

The Hebrew bible's curse on the serpent finds clear parallels in the Egyptian Pyramid Texts which in fact contain over 700 utterances and curses on the snakes that impede the pharaoh's progress through the underworld. In many of these texts, as in Genesis, the image of crawling becomes important. The Hebrew curse that the snake will crawl on its belly does not imply that the serpent once had legs (although legged snakes, *Nehebkau*, are part of an Egyptian underworld fantasy; see Zevit 2013: 198–9) but asserts that the snake will not adopt the attack position by rearing up (below no. 6) but will stay on its belly in a non-threatening pose. In this posture the snake can easily be controlled beneath the human foot, an image often repeated in the Pyramid Texts. The command that the serpent will eat dust is clearly not a reference to the actual diet of snakes but a reiteration of its recumbent posture as well as a comment on its natural habitat of caves and holes: in the Sumerian *Descent of Ishtar*, the underworld is described as a place where snakes dwell and where their bread is clay and their food is dust.

3. Snake observations

Egyptian New Kingdom and Late Period

a) Sayings, New Kingdom and Late Period

He who is bitten of the bite of a snake is afraid of a coil of rope.
The hissing of the snake is more effective than the braying of the donkey.
A snake that is eating has no venom.
Death comes to the snake because of its love of biting.
The small snake has poison.
The snake on which one steps ejects a strong poison.
The poison of a breathing snake is (in) its mouth; the poison, of an inferior man is (in) his heart.
Do not kill a snake and then leave its tail.

b) Egyptian dream omens (Chester Beatty III, P. BM 10683)

Killing a snake. GOOD. Killing a quarrel.
Bitten by a snake. BAD. It means the occurrence of a quarrel against him.

c) Popular stories (The Doomed Prince)

Then his wife filled a [bowl] with [wine (?)] and another bowl with beer. Thereupon a [snake] came out [of its] hole to bite the youth. But his wife was sitting beside him, not sleeping. [She placed the bowls before (?)] the snake. It drank, it became drunk; it lay down on its back. Then [the woman had] it hacked to pieces with her axe.

d) Extracts from the Brooklyn Medical Papyrus (based on Sauneron 1989)

Great Serpent Aapep: entirely red, belly white, 4 teeth – dies quickly
gany: entirely black – dies quickly
ikher: dark, comes to a man – dies quickly
ka-en-am: quail-coloured, big head, tail like mouse – can be saved
kedjuu: small as a lizard – dies quickly
sedbu: red, yellow eyes – can be saved
nebed: green, white belly – can be saved
fy tiam: colour of a *rer*-snake – non-lethal
white henep: entirely white; four teeth – may die
red henepu: white, red back; four teeth – can be saved
neki: several cubits long – non-lethal
fy: image of a lotus on its head – non-lethal
fy (blowing): blue-green on neck, unique crawling motion – can be saved
sedbu: gold belly and neck, found in fields – harmless

COMMENT: Needless to say, one of the greatest dangers for people in the ancient world was the common presence of poisonous snakes. In Egypt the term *ḥfꜣw* was commonly used for all types of poisonous snake located throughout the deserts, swamps, threshing-floors, livestock-enclosures

and houses of Egypt. The Brooklyn Medical Papyrus (XXX Dynasty) is largely devoted to documenting and analysing varieties of snake bites and venoms (Nunn 1996: 40). The opening section reads: 'Beginning of the collection of remedies to . . . drive out the poison of all . . . snakes, all scorpions, all tarantulas and all serpents, in the hand of the *kherp* priests of Selqet and to drive away all snakes and to seal their mouths.' The Egyptians developed an intimate knowledge of snake venoms and while the ancient taxonomies may not match current knowledge of the estimated thirty-six species of snake to be found in Egypt, nevertheless the ancient Egyptians had a sophisticated understanding of one of their most fearsome potential enemies (Vernus and Yoyotte 2005: 315–19). The Brooklyn Papyrus lists snakes according to appearance and then suggests remedies to cure victims of its bite. Some of the remedies are specific for certain types of snakes, while others deal with specific symptoms. Enemas, compresses, unctions, massage, incisions and fumigations are all suggested as remedies alongside magico-religious incantations.

Snake-deities, intended to neutralise the threat of attack and poison, were widely worshipped throughout Egypt (Vernus and Yoyotte 2005: 302–15). The goddess Renenutet, for example, whose name is derived from the verb 'to nurse', was a goddess of grain and granaries, while Meretseger was a local goddess of the hill that rises above the Valley of the Kings and was an object of domestic cult at the village of Dier el-Medina (Vernus and Yoyotte 2005: 308). Kitchens in the village houses have yielded dozens of snake figurines, covered in cooking soot, suggesting that the goddess was particularly evoked in the kitchen area, a place to which snakes were naturally drawn.

4. Fear of snakes

a) Neo-Assyrian prayer (after Foster 1996: 128–9)

I seize the mouth of all snakes, even the (horned-)viper,
Serpent(s) that cannot be conjured:
The 'No-One-is-There', the 'Vacant Loiterer',
The 'Fish' snake, the 'Coloured Eyes',
The 'Eel', the 'Hissing Snake',
The 'Hisser', the 'Window Snake.'
It came in by a crevice; it went out by a drain.
It struck the gazelle while it slept.
It secreted itself (?) in a withered oak.
The snake lurks in a beam,
The serpent lurks in wool.
The serpent has six mouths, seven tongues,
Seven are the poisonous vapours (?) of its heart.
It is bushy of hair, horrible of feature,
Its eyes are frightful.
From its mouth a spring issues forth,
Its spittle cleaves stone.

Adorned like a reed, green like *Tishpak*,
His snout runs to a point, his mouth is a ball of flame,
His tongues are glaring light:
May his glaring lights . . . for me.

b) Assyrian prayers in Akkadian

I, so-and-so, son of [so-and-so], your servant, am afraid, frightened, and terrified, on account of the evil of a snake.

Oh Shamash, King of heaven and earth . . . I come before you, I have seized the hem of your garment! On account of the evil omen of a snake which I saw come right into my house for (its) prey, I am afraid, anxious, frightened. Deliver me from this evil!

c) Akkadian omens

If a snake crosses from the right of a man to the left of a man — he will have a good name.

If a snake crosses from the left of a man to the right of a man — he will have a bad name.

COMMENT: These Assyrian documents vividly demonstrate the abject terror which snakes inspired. Several ancient texts attempt to classify snake species, although the specific species referred to are often lost in translation: take, for instance, this Akkadian description of a snake known as the *hulmittu*: 'This is the snake's appearance: its eyes are multi-coloured, the face is yellow . . . there is black (. . . on its. . .): the name of this snake is *hulmittu*.' When the zoologist Norman Corkill visited Iraq in the late 1930s, he observed and documented as many of the native snake species at that time as he could. He identified nine species, of which five were non-poisonous (but still capable of biting and injuring): the Javelin sand boa (*Eryx jaculus*), Gray's rat snake (*Platyceph ventromaculatus*), the Large whip snake (*Coluber jugularis*), the Dice snake (*Natrix tessellata*) and the Montpellier snake (*Malpolon monspessulanus*). A further four species were highly venomous and deadly to humans and other animals: the Hoodless cobra (*Naja morgani*), the Levantine viper (*Macrovipera lebetina*), the Saw-scaled viper (*Echis carinatus*) and the Horned viper (*Cerastes cerastes*).

The Horned viper proves particularly interesting for the cultural history of snakes, since it is the only Iraqi serpent which can be identified both by its modern scientific name, and its ancient Mesopotamian terms: the Sumerian *ušum/ muš-sà-tùr*, and the Akkadian term *bašmu*. This particular species is well attested in the Near Eastern mythical imagination where it is often likened to a dragon and regarded as an agent of Tiamat; after all, the Horned viper really does have horns (as is clear in the Egyptian alphabetic hieroglyph 'f'). In Akkadian texts the *bašmu* was said to be 'created in the sea, his length is sixty "double miles"'. It is deadly and likes to hide in thick coverage, as an Old Babylonian text makes clear: 'In the belt dwells the snake; in the foliage dwells the *bašmu*.'

The texts all stress that humans have no control over the reptiles' ability to infiltrate the human sphere of existence; this is why they so commonly appear in omen and prophecies. The fact that snakes lurk unhidden and unwanted within domestic spaces is particularly worrisome and disturbing. Perhaps unsurprisingly there were many rituals, spells and incantations aimed at preventing or curing snake bites. The Hebrew bible records several such rites: in the Sinai wilderness Yahweh sent 'fiery serpents' to vex his ungodly people until they repented. When they beheld a bronze serpent set upon a pole (Numbers 21.4–9) they were returned to their god's good favour through some kind of homeopathic magic. In a later period the Israelites made a Nehushtan or bronze serpent in an attempt to counter the destructive quality of the snake and to harness its positive symbolic qualities (2 Kings 18.4).

5. Snake behaviour: the legend of Etana

Middle Assyrian Akkadian version of an Old Babylonian story (after Foster 1996: 437–9)

At the top of the tree the eagle gave birth,
At the root of the poplar the serpent gave birth.
In the shade of that poplar,
Eagle and serpent became friends with each other.
They swore the oath together and became comrades.
They told each other their innermost desires.
The serpent would go out to hunt,
Wild sheep (?) and aurochs (?) of the steppe (?) the serpent would hunt down.
The eagle would eat, turn away, his children would eat.
[Buck, gazelle of the steppe the serpent would hunt down,
[The eagle would eat, turn away, his children would eat.
[Beasts of ?] the steppe, animals of the earth, the serpent would hunt down,
[The eagle] would eat, turn away, his children would eat.
[After the] eagle's [children]
[Had grown big] and flourished,
Had acquired [] . . .
[The eagle set his thoughts]
[Upon eating his friend's young].
.
.
.
.
They were hungry . . . [I, they gathered
[The littlest fledgling, exceedingly [wise],
[Said these words] to the eagle, his father,
'Do not go down! No doubt [the serpent is lurking in the wild ox]!
The netherworld will h[old you fast]!
[It is] the [serpent's] counterplot,
'[His] wings are stretched out [to seize you],
The netherworld [will hold you fast]!
[The eagle] did not ag[ree
Nor did he [listen to his son's words].
He went down and [lighted on the wild ox],
With . . . [the birds ?]
A first time [inspecting in front and behind it],
The eagle lo[oked at the meat].
A second time [inspecting in front and behind it],
The eagle loo[oked at the meat].
A third time [inspecting in front and behind it],
The eagle lo[oked at the meat].
He plunged (?) into the inna[rds of the wild ox],
In search of the juiciest meat,
[He was working forward] into the belly of the w[ild ox].
[As he entered] into its vitals,
The serpent seized him [by his wings]!
He brought him out and [. . .]

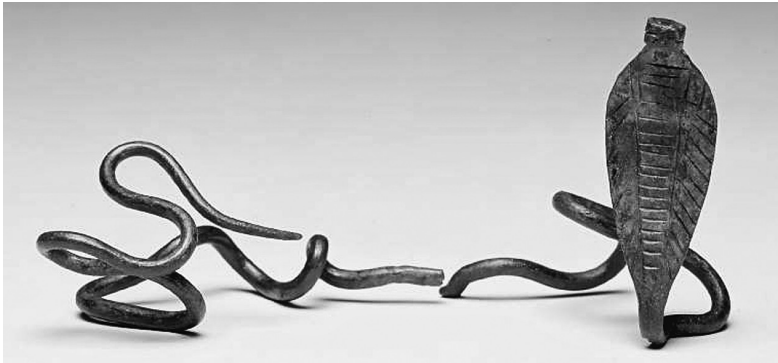
‘[You were] the intruder [
Before Shamash [
May the king of the g[ods . . . be great!
[May the] judge of [my] case []
[] who binds fast []
You are the one, eagle,
You flew down [. . .]’

COMMENT: *The Legend of Etana* was among the most popular works in the Mesopotamian literary tradition. It recounts the exploits of Etana, the world’s first king, although the second tablet of the cuneiform text tells the story of an unusual and delicate friendship shared by a snake and an eagle (although ultimately the symbol of a cosmic struggle). The serpent resides in the roots of a tree which grows in a temple while the eagle nests in its branches. Here both animals raise a family and attempt to feed their young by hunting together. One day, driven on by instinct, the eagle devours the snake’s young and the bewildered and angry serpent calls out for justice to Shamash, god of the oath. The deity responds by causing a wild ox to die and by entreating the snake to crawl into its cadaver and wait there, in hiding, until the eagle comes to feed off the decaying flesh. In this way is the eagle indeed apprehended by the resentful, grieving serpent.

There are some common Near Eastern story-telling motifs found in the tale, such as the wisdom of the young (the eagle chick) over the old (the eagle); this is a parody of traditional wisdom literature tropes. More interesting, though, is the accurate portrayal of the natural characteristics of these two intrinsic enemies. Snakes are frequently devoured by eagles, of course, but it is also possible to see birds of prey, such as eagles, hawks and vultures, killed by snakes which will hide in carcasses. The Akkadian scribal tradition of this lively story is clearly based upon accurate observations of wild animal behaviour.

6. Snake wand: the uraeus

***Copper alloy snake wand, the Ramesseum, Thebes,
Middle Kingdom (Cambridge, Fitzwilliam Museum E.63.1896).
Photograph courtesy of The Fitzwilliam Museum***



COMMENT: The uraeus – the rearing cobra – was commonly placed on the brows of pharaohs as a protective talisman but they share a function with the less commonly found snake-wands, fashioned into the form of rearing cobras (Ritner 2006 assesses the evidence for all-known snake-wands). The Hebrew bible recounts a story in which Egyptian court magicians (or snake

charmers) were able to change inanimate snakes into living serpents and how, inspired by Yahweh, Moses and Aaron also practised the art (Exodus 7.8–13; Vernus and Yoyotte 2005: 319–20). In fact, Aaron's act of throwing a snake-sceptre before Pharaoh was an assault on royal authority itself since the serpent was so closely entwined with the pharaonic office of kingship. For their part, the Egyptian magician-priests possibly knew how to transform a living cobra into the form of a lifeless stick by applying pressure to its neck so that the snake became immobile.

This snake wand was discovered in a Middle Kingdom shaft tomb at Thebes, lying alongside the tools of an Egyptian conjuror – a figurine of a lion-headed female (possibly depicting the goddess Aha or Bes) holding two snakes, three 'magic knives' crafted from hippopotamus ivory and incised with more snake-figures, a quantity of human hair, seeds, amulets and beads – the entire contents of a 'magician's box' (see Bourriau 1988: 113 and Raven 2012: 76–7). Coffin Text spell 885 provides a rationale for snake-wands: 'The snake is in my hand and cannot bite me', and as Ritner explains, 'By grasping snakes or other threatening animals the deity (and) his priestly representative [has] mastery over the animals and the power they embody, rendering them harmless to the holder but dangerous "weapons" against inimical forces' (2006: 213).

7. Snakes and their habits

Aristotle Historia Animalium 594a 4–24

Animals with scales, such as the lizard and other quadrupeds of the same kind, and snakes, are omnivorous, eating both flesh and plants. Snakes are more voracious than any other animal, but they drink little, as is the case with all animals which have a spongy lung; this includes those animals which have little blood, and those which are oviparous. Serpents also have a weakness for wine, and some people use this to catch vipers, putting out shallow bowls of wine near dry walls and picking up the snakes when they are drunk.

Snakes are carnivorous; whatever prey they catch, they suck the nourishment from it, then excrete it whole. It is very similar to the habits of like creatures such as spiders, except that spiders suck their prey dry from the outside, while snakes do so in their stomach. Snakes will take whatever prey happens to offer itself – they eat birds and small animals, and will also swallow down eggs – and in order to eat it, the snake stretches itself to the full length of its body, and then twists and contracts itself little by little until, when it stretches out again, its meal has gone down. It has to do this because its stomach is long and narrow. Both poisonous spiders and snakes can survive for a long time without eating, as can easily be seen in those which are kept by the sellers of drugs.

COMMENT: Aristotle's zoological knowledge of snakes was quite extensive: as well as describing their feeding habits above, he mentions the shedding of their skin (*HA* 600b 19–601a1), their eggs, which he says are 'produced in chains, like women's necklaces' (558a 25–b4), and (rather more obscurely) their method of movement (*LA* 707b 6–708a 20). All of this clearly stems from observation, and he comments twice that snakes are frequent residents of houses, hunting mice (*HA* 609b 28–30, 612b 2–4). He does not distinguish very clearly between different types of snake apart from the poisonous viper (he also knows that vipers are, unusually, viviparous), perhaps because snakes' colouring can be very variable, making identification tricky. Beyond the scientific community, folk tales about snakes persisted, such as the claim that poisonous snakes were spontaneously generated from the spines of evildoers after their death (*Ael. NA* I.51). One of the most striking aspects of this passage, however, is the indication at the end that poisonous

snakes were kept in captivity by the makers of *pharmaka*; this was undoubtedly to obtain parts for medicines or amulets as well as for the venom itself, a process described by Pliny (NH XXIX.21).

8. Sacred snakes

IG IV² 1 121.113–19, 122.69–82

17. A man had his toe healed by a serpent. This man who was suffering very badly from a malignant sore on his toe was carried outside by temple attendants in the daytime and set in a chair. He fell asleep, whereupon a snake came out of the Abaton and healed his toe with its tongue, then withdrew again to the Abaton. He woke up healed, and said that he had had a dream in which a handsome young man had poured a drug onto his toe.
33. Thersander of Halieis, for consumption. Thersander had slept in the sanctuary but not received a dream, so he was taken back to Halieis on a wagon. One of the serpents from the sanctuary has found its way onto the wagon, and spent most of the journey coiled around the axle. When they arrived in Halieis Thersander lay down in his house, and the snake came down from the wagon and healed him. The townspeople of Halieis made an enquiry into what had happened, and were at a loss what to do with the snake, whether to take it back to Epidauros or to keep it there, so they decided to consult the oracle at Delphi on the best course of action. The god advised them to keep the snake, and to build a sanctuary to Asclepius and set up a statue in the temple. When the oracle was communicated to the Halieians they established a sanctuary to Asclepius and followed all the other instructions from the god.

COMMENT: The inscriptions from Epidauros recording cures performed by Asclepius' snakes are well known, but they offer the best evidence for the sacred snake and its role in ancient cult. Sacred snakes in other cults were often unseen (e.g. Hdt VIII.41.2; Ogden 2013: 347–9), but the snakes at Asclepius' healing sanctuary at Epidauros were real creatures which interacted with worshippers seeking cures. The Asclepian snake was a particular kind said to be yellow in colour and without poison, found only in the region of Epidauros (Pausan. II.28.1), today most commonly identified as *Elaphe quatuorlinea*, the four-lined rat snake (Bodson 1981: 67–77). The snakes lived in the sacred grove at the sanctuary and, as the first cure shows, were considered to be manifestations of Asclepius himself. While the cures emphasise the snakes' acting of their own volition to cure the suppliants, Ogden (2013: 382) suggests that they were regularly gathered up by the temple attendants and taken to the Abaton to lick, bite or lie upon the patients. All sacred snakes were offered the same diet of barley-cakes and honey, but as Ogden notes, such food is completely unsuitable for snakes, which can eat only live creatures and eggs (2013: 365–6). One must assume, therefore, that the offerings of honey-cakes or barley in milk and honey served to attract rodents and other creatures which in turn served as prey for the snakes.

When Asclepius travelled, it was in the form of a snake (Pausan. II.10.3): the cult was introduced to Rome in 293 BCE in response to a plague, and according to Livy the god was brought in the form of a snake, which travelled from Epidauros by ship, taking up residence on an island in the Tiber where a temple was founded (Livy 10.47; *Peri.* 11). Pliny adds that in his time the Asclepian snake was commonly kept as a household animal, and existed in very large numbers (NH XXIX.22).

9. The snake-bursting Marsi of Marruvium

Lucilius fr. 605–6 (Warmington)

‘He will now burst in two, as when a Marsian makes snakes burst open, having stretched all their veins with his incantation.’

COMMENT: According to Roman beliefs the Marsi, inhabitants of the central Apennines, had unusual powers over snakes: they could deter venomous snakes and cure snakebites through spells and herbs. The idea was evidently proverbial even before the time of Lucilius in the second century BCE, and in its extreme form – that the Marsi could cause snakes to swell up and burst with their incantations – is found in Virgil too: ‘with song the cold snake in the meadows is burst asunder’ (*Ecl.* VIII.70–1). Dench (1995: 159–66) discusses the practices which may lie behind the claims, and certainly Roman belief in the Marsians’ powers persisted, as the third-century emperor CE Elagabalus is said to have collected poisonous snakes with the assistance of Marsic priests (SHA *Elag.* 23.2). Certain tribes in other countries were credited with the same powers in antiquity, such as the Psylli of Libya (Ael. *NA* I.57, XVI.27–8); the idea reveals the anxiety felt about venomous snakes and the difficulty of treating snake bites.

Medical, farming and zoological texts are packed with remedies for snake bites and methods of deterring snakes; the sheer variety of remedies indicates that little practical could in fact be done, but as the identification of snakes was inexact, bites from harmless snakes or non-venomous strikes were no doubt treated and claimed as cures. Even domestic animals were felt to be at risk from snake bites: Vegetius’ *Mulomedicina* includes remedies for horses which have been bitten by snakes (V.3.77, 79), while Columella states that oxen are particularly prone to being bitten, because they will often lie down on snakes by mistake in the fields, and their weight will provoke the snake to bite. He recommends treating them with burdock or mountain trefoil (*De re rust.* VI.17.1).

10. The dire snakes of Libya

Lucan Civil War IX.700–36

Here (in Libya) Medusa’s blood brought forth snakes from the dust, raising first the deadly asp with swollen neck. No serpent has more venom in it, for here the blood and clotted poison fell most plentifully. The asp, desiring heat, never willingly passes into colder regions, haunting the desert only as far as the Nile. But, shameless in our pursuit of gain, we seek out this deadly Libyan snake and make a trade in asps to Italy.

There too the great *haemorrhoids* spreads out its scaly coils, the snake which makes its victims’ blood pour out; there the *chersydros* is born to inhabit the shifting Syrtes, the *chelydros* which leaves a smoking trail behind it, and the *cenchris* which moves always in a straight line, its belly chequered with more spots than Theban serpentine with its tiny patterns.

There is found the *hammodytes*, perfectly camouflaged in the burning sands, the *cerastes* with its coiling spine and the *scytale*, the only snake to shed its skin while frost is still on the ground; the shrivelled *dipsas*, the deadly *amphisbaena* with a head at each end, and the *natrix* which poisons the water; the flying *iaculus*, the *parias* which gouges a track with its tail, the voracious *prester* with its gaping, foaming mouth, and the corrosive *seps*, which dissolves its victims’ body and bones together.

But the basilisk, king of snakes, strikes fear into the other serpents with its hissing, killing without poison; it drives away all other snakes and rules the desert alone. The

draco, too, which in all other countries is harmless and considered divine, shining with its golden glow, burning Africa makes deadly: it sucks birds from the air and hunts whole herds of animals, coiling round great bulls and killing them with a blow of its tail; even the mighty elephant is not safe from it. The *draco* is fatal to all, and needs no poison to kill.

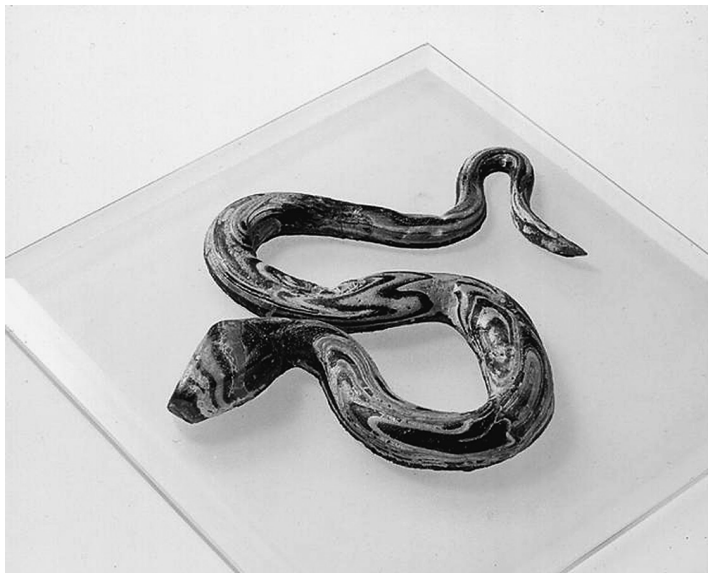
Through the dry desert among these noxious creatures Cato leads his hardy soldiers, watching as so many meet a cruel fate, suffering strange forms of death brought about by a tiny wound.

COMMENT: Lucan's poem continues with lengthy and lurid descriptions of the deaths of Cato's soldiers from bites inflicted by some of the snakes listed here: the *dipsas* brings death by uncontrollable thirst; the *seps*' poison dissolves its victim; the *prester* causes him to swell unrecognisably; and the *haemorrhoids* to spurt blood through his pores. The *iaculus* even manages to kill a soldier by hurling itself through his head like a spear. Why does this discussion of African snakes appear in a poem about Caesar's civil war? It is obviously a hugely grisly and enjoyable tour-de-force, and demonstrates Lucan's learning, but is also part of a tradition of poetry describing poisonous animals: it is drawn from the second-century BCE *Theriaca* of Nicander, a poem about venomous animals and antidotes against them. Braund (1992: 312) notes that other didactic works on poisonous snakes were written in the same period, and suggests that unlikely though it seems, it may have been a fashionable literary topic. The viper was the only poisonous snake native to Italy, so writers took great interest in other regions where venomous snakes were more common and more various. It is not possible to identify all the snakes named here, since they run the gamut from the real (*asp*) to the completely imaginary (*amphisbaena*, *basilisk*), and also because their identities are based solely on the effects of their poisons. Some, such as the *cerastes* and *seps*, can be identified with African vipers, though obviously much exaggerated for effect.

11. Roman glass snake

Marbled glass snake, Miho Museum SS1662, first century CE.

Photograph © Miho Museum



COMMENT: Roman glassmaking was technically very advanced, and many beautifully blown and coloured glass vessels and ornaments have been preserved. Among Roman glass objects are some very unusual glass snakes, rendered in coiling shapes in all kinds of colours – the example above is beautifully marbled in shades of brown, white, yellow and blue, but they are also found with stripes or diamonds in shades of purple, blue, white, green and yellow. Only a handful survive complete (examples can be seen in the Getty Museum and the New Orleans Museum of Art), but many more individual fragments are known (Goldstein 1979: 212–13). What were they for? The creation of glass perfume bottles in zoomorphic forms was common, especially birds (Harden et al. 1987: no. 37), but the snakes are solid, not containers; they are flattened underneath, allowing them to lie on a flat surface. Because they are prized by collectors today, few have any kind of archaeological context. They have sometimes been interpreted as mosaic inlays, but some have raised heads, making them unsuitable as inlays. The closest parallels are found among metal votive offerings, and a bronze snake from the Asclepeion at Pergamum illustrated by Bodson (1981: fig. 2) is similarly flat, with rippling body and raised head. Most probably, just as with jewellery, the form of the snake appealed to the ancient glassmaker because the material allows for very life-like rendering of a coiling snake, and for intricate patterning: glass snakes may have been purely decorative.

Bibliography

- G. Algaze, 'The Uruk expansion', *Current Anthropology* 30 (1989), 571–608.
- J.M. Aynard, 'Animals in Mesopotamia', in A. Houghton Brodrick (ed.), *Animals in Archaeology* (London 1972), 42–68.
- L. Bodson, 'Les grecs et leurs serpents. Premiers resultats de l'etude taxonomique des sources anciennes', *Ant. Class.* 50 (1981), 57–78.
- J.D. Bourriau, *Pharaohs and Mortals; Egyptian art in the Middle Kingdom* (Cambridge: Fitzwilliam Museum, 1988), 113, #100.
- S. Braund, *Lucan: Civil War* (Oxford 1992).
- J.H. Charlesworth, *The Good and Evil Serpent. How a Universal Symbol Became Christianized* (New Haven and London 2010).
- E. Dench, *From Barbarians to New Men: Greek, Roman and modern perceptions of peoples from the Central Apennines* (Oxford 1995).
- T.A. Forti, *Animal Imagery in the Book of Proverbs* (Leiden 2008).
- B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 1996).
- A. George and E. George, *The Mythology of Eden* (Lanham 2014).
- S.M. Goldstein, *Pre-Roman and Early Roman Glass in the Corning Museum of Glass* (New York 1979).
- A.S.F. Gow and A.F. Scholfield, *Nicander: the poems and poetical fragments* (Cambridge 1953).
- I.N. Habeeb and N. Rastegar-Pouyani, 'Geographical distribution of the snakes of Iraq', *Mesopotamia Environmental Journal* 2.3 (2016), 67–77.
- D.B. Harden et al., *Glass of the Caesars* (New York 1987).
- S. Johnson, *The Cobra Goddesses of Ancient Egypt* (London 1990).
- O. Keel and T. Staubli, *Les animaux du 6ème jour. Les animaux dans la Bible et dans l'Orient ancien* (Lausanne 2003).
- M. Moazami, 'Evil animals in the Zoroastrian religion', *History of Religions* 44.4 (2005), 300–17.
- J.F. Nunn, *Ancient Egyptian Medicine* (London 1996).
- D. Ogden, *Draco: dragon myth and serpent cult in the Greek and Roman worlds* (Oxford 2013).
- D. Orr, 'Snakes on Pompeian household shrines', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 350–3.
- R.S. Raven, *Egyptian Magic* (Cairo 2012).
- R.K. Ritner, 'And each staff was transformed into a snake: the serpent-wand in ancient Egypt', in K. Szpakowska (ed.), *Through a Glass Darkly. Magic, Dreams and Prophecy in Ancient Egypt* (Swansea 2006), 205–25.
- M.C. Root, 'Animals in the art of ancient Iran', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 169–210.

- S. Sauneron, *Un traité égyptien d'ophiologie – Papyrus du Brooklyn Museum nos 47.218.48 et 85* (Paris 1989).
- A. Spycket, 'Les figurines de terre cuite 1986, 1988–1989 (9e–11e campagnes)', in B. Hroudà (ed.), *Isin-Isan Bahriyat IV. Die Ergebnisse der Ausgrabungen 1986–1989* (Munich 1992), 56–73.
- D. Stutesman, *Snake* (London 2005).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- P. Vernus and J. Yoyotte, *Bestiaire des pharaons* (Paris 2005).
- G.J. Wenham, *Genesis 1–15* (Nashville 1987).
- L.S. Wilson, *The Serpent Symbol in the Ancient Near East* (Lanham 2001).
- Z. Zevit, *What Really Happened in the Garden of Eden?* (New Haven 2013).

Insects and molluscs

ANT

Ants constitute the family of the order *Hymenoptera* (membranous wings), containing over 10,000 species (Sleigh 2003). Only the sexual forms of ants are actually winged, the wingless majority being workers and soldiers, forming colonies which range in number from a few dozen to many millions.

Ants (Hebrew *mala*, Akkadian *namalu*, Egyptian *škt*, Greek *murmex*, Latin *formica*) attracted a surprising level of interest in antiquity because of their status as a social insect. Creatures such as ants, bees, wasps and cranes, which live together in communities with apparent hierarchy and organisation (Ar. *Hist. An.* 488a8–10), seemed to emulate the most valued form of human activity – the creation of state and law – and this fascinated ancient philosophers; Pliny, for instance, credits ants with ‘*reipublicae ratio*’, ‘the idea of government’ (NH XI.111). They delighted in descriptions which emphasised the intelligence and moral virtue of the insects, crediting them with emotion, reason and a very human concept of order. Although the observation of ants’ behaviour tested their capabilities to their limit, ancient naturalists spent considerable time observing ants’ activities and interactions; they understood the difference between worker and ‘leader’ ants, and the form of ants’ nests and tunnels, although their breeding habits were more difficult for them to observe: the idea of spontaneous generation in the earth was retained throughout antiquity. Probably for the same reason of difficulty of observation, ancient writers do not distinguish the many species of ant, although Aelian (*On Animals* VI.15) supplies a single description of termites and their mounds in Africa.

Ants were proverbial both for hard work and for their numbers: the two combine in Virgil *Aen.* IV.402–7, where the Trojans preparing their ships for departure are likened to ants swarming about gathering barley. They were believed to work even on moonlit nights, and very frequently used as a moral exemplar for the idle. In other contexts, however, they were seen as troublesome pests of farm and garden.

Despite the interest taken by ancient philosophers in the ant, it cannot be said that the insect was important in antiquity, but in fact the ant seems to have benefitted significantly from association with humans at this period. Agriculture made grain available in regular and reliable quantity (Aelian (*On Animals* II.25) speaks of ants coming out to gather grain at threshing time), the large-scale storage of cereals offered the opportunity for depredation year-round and there

is even evidence that the spread of the Roman empire, with the heating of houses and baths, allowed Mediterranean ants to extend their range into northern Europe: the Mediterranean species *Hypoponera punctatissima* has been found in Roman remains in Britain (Buckland 1991, 1976).

1. Ants as a model for human industry

Hebrew bible, Proverbs 6.6–9, 30.24–8

Go to the ant, you sluggard;
consider its ways and be wise!
It has no commander,
no overseer or ruler,
yet it stores its provisions in summer
and gathers its food at harvest.
How long will you lie there, you sluggard?
When will you get up from your sleep?

Four things on earth are small,
yet they are extremely wise:
Ants are creatures of little strength,
yet they store up their food in the summer;
hyraxes are creatures of little power,
yet they make their home in the crags;
locusts have no king,
yet they advance together in ranks;
a lizard can be caught with the hand,
yet it is found in kings' palaces.

COMMENT: The literature of the ancient Near East is full of insightful observations on the behaviour of ants which are used to illuminate human behaviour. The ant is mentioned twice in the Hebrew Book of Proverbs as an example of diligence and industry and thus a fitting role-model for humankind. While most ants feed off dead insects, some eat vegetation and seeds; the so-called harvester ant (*Messor semirufus*) feeds on grain collected from territory near to its anthill and stores it within the upper chambers of its nest (Bodenheimer 1960 (2): 263). It is this species of ant which is eulogised by the biblical author, and its admirable behaviour was witnessed by other ancient societies too. A charming Egyptian lyric preserved in the Insinger Papyrus (25. 1–4), for instance, notes that:

A little wind carries the ship.
A little bee brings the honey.
A little ant carries the crumb.
A little locust destroys the vine.

2. The chaos of battle represented as ants without order

Akkadian royal inscription, the eighth campaign of Sargon II (Foster 2005: 798)

I drove the troops of Urartu, the wicked enemy . . . into retreat. . . Their horses choked the chasms and the mountain gullies while they, like ants in distress, took whatever difficult paths were open to them.

COMMENT: Ants are the insects most commonly used as similes in Akkadian literature. In this simile, taken from an Assyrian royal text that describes the successful invasion of Urartu, the image of limitless numbers of ants in confusion, disrupted from their usual orderly behaviour, is used to depict the scattering of the enemy forces. The insignificance of ants as an enemy easily routed is a theme explored in other Near Eastern texts too, such as the Hurrian myth of Kumbari's battle against the weather god, Teššub: 'let him chop him up fine like chaff; let him grind him underfoot, like an ant' (Collins 2002: 242). But the ant simile can also be more positive, as when Assyrian soldiers are likened to the insects for their intrepid and enterprising behaviour: 'They, like ants, made their way over the most difficult terrain' (Luckenbill 1927 (2): 82).

3. The fighting ant

Canaanite letter from Prince Lab'ayu of Shechem to Pharaoh, Amarna Letter (EA) 252, 16–22 (Moran 1992: 305)

(I am slandered) before the king, my lord. Moreover, when an ant is struck, does it not fight back and bite the hand of the man who struck it? How at this time can I show defence. . . ?

COMMENT: There are over 285 species of stinging ants, and while many ants bite (or, technically, sting) in defence, causing irritation by injecting formic acid, certain species (like fire ants) are aggressive and can even attack and kill small animals. For humans, an ant sting is painful and the after-effects of the sting can be fatal to individuals who are sensitive to the venom. In the simile employed by Prince Lab'ayu, the ruler of Shechem justifies his aggressive behaviour against his prisoners to the Egyptian pharaoh and emphasises that, like an ant which is attacked, he will fight back in self-defence. One might compare the prince's simile to a poetic fragment from the Greek Archilochus (fr. 23.15): 'I know how to hate my enemy and to be an ant that [bite]s him.'

4. Ant omina

Akkadian omen text (Bodenheimer 1960 (1): 97)

When black ants appear in the house of a man, he will reach an extraordinary old age.
When black ants with wings are seen in the house of a man, the house will be destroyed and his son will die.

When small black ants with wings are seen in the house of a man, his wife will die and his house will be destroyed. . .

When white ants are seen in the house of a man, the house will collapse.

When large white ants with wings appear in the house, this will be destroyed. . .

When white and dark red (or small) ants are seen in the house, the back part of the house will perish. . .

When yellow ants are seen in a house . . . disaster. . .

When black ants kill dark red ants in the house of a man, joyful shouts will be heard in the house. . .

When white ants kill dark red ants in a house, mourning will occur. . .

When the nest of [. . .] ants is destroyed in a house, a change of mind will occur. . .

When ants transport their eggs from a house, the house will prosper.

When small ants enter a house and fight, there will be discord in the house. . .

When an ant is seen in a jar, the house will be pillaged. . .

When ants [. . .] in a house, toothache will occur.

COMMENT: Animals and birds appear frequently in Assyrian and other Near Eastern divination texts, and the present example, excerpted from hundreds of lines of cuneiform text which focus on divination through the observation of ant-behaviour, are one in a series of tablets which deal with insects (moths, locusts, grasshoppers and caterpillars are also analysed for signs). The ants, which must have been very common in the houses of Mesopotamia, are mainly identified through their colours (black, yellow, red and white – possibly termites) and the differences between their winged and wingless forms. Their fighting and breeding habits and their transportation of young ‘eggs’ (*pupae*) are all well observed in the text too. Interestingly, in all the divination texts, the ants appear inside the house and never outdoors and the majority of the ant *omina* have unfavourable readings.

5. A cure for gout

Egyptian Demotic Magical Papyrus of London and Leiden, verso col. VIII, 1–8.

Gout –

You make the man sit down; you place clay under the feet of the man; you put . . . to it (?), his feet resting on it; you ask the man, saying, ‘Has it hearkened?’ for three days.

Thereafter you take an ant, you cook it in oil of henna; you anoint his feet with it. When you have finished, you take Alexandrian figs and dried grapes and potentilla; you pound them with wine; you anoint him besides these; and you blow on him with your mouth.

COMMENT: Dating to the second or third century CE, this famous papyrus was instrumental in the decipherment of the Demotic Egyptian dialect. It is also of great importance for the study of magic in antiquity. Included are spells to obtain visions, raise the dead, cause sexual attraction or, as here, cure diseases. This section, relating to the treatment of gout and other affections of the feet, recommends smearing the afflicted area with the poultice of an ant cooked in henna oil. Many ants carry various defensive poisons and repellents, for they are competing against other insect species, animals and birds, but in this Egyptian medicine-spell the theme of inversion (typical of such spells) renders the ant poison harmless, indeed, beneficial. Magic charms often refer to things that cannot happen in nature – ‘just as a mule does not breed, a cock drinks but does not urinate, an ant has no blood, so let my sickness disappear’ – so here the ant’s poison helps cure a pain (see further Versnel 2002: 150). Some Near Eastern peoples, like the Hittites, considered the soil turned up by ants to have healing properties, too, and used it in their magico-medical recipes.

6. Intelligence of ants

Plutarch On the Intelligence of Animals (Moralia 967d–968b)

The household management and provision of the ant is difficult to describe in detail, but it would be wrong to pass over it altogether. For nature offers no smaller mirror of great and worthy pursuits, and in the ant can be seen, like a reflection in a drop of water, every virtue in miniature: 'there is affection among them' in their social life, there is the likeness of courage in their devotion to labour, and in them are to be found the seeds of self-control, intelligence and justice.

The philosopher Cleanthes, though he denied that animals possess reason, says that he witnessed the following sight: a group of ants carrying a dead ant approached another ant-nest. Some ants came out of the nest and seemed to converse with them, then went back again. This happened two or three times, then finally the ants brought up from below a grub, as though it were a ransom for the corpse, and the first group of ants picked it up in exchange for the dead ant and departed.

Their friendly feeling when they meet each other is obvious to everyone, those who are not carrying any burden giving way to those who are, and allowing them to pass; and the way that they gnaw through and dismember any objects which are difficult to carry or to manoeuvre, making them easy to manage between many. Aratus says that it is a sign of rain when they spread out and cool the seeds which they have stored:

'When from their hollow hills the ants

In haste bring up their eggs.'

But some, instead of 'eggs', write 'food', meaning the grain which they have stored away; this they bring to the surface when they notice that it has become mouldy and fear that it will rot and become inedible. But the greatest of all intimations of ants' intelligence is the way that they prevent the germination of their stored wheat. For the grain does not remain dry and unspoiled, but softens and becomes milky as it begins to sprout. In order to prevent it going to seed and losing its value as food, so that it remains edible, the ants eat away the germ from which the shoot of wheat grows.

I do not approve of those who study anthills 'anatomically', as it were, but they say that the passage down from the entrance is neither straight nor easy for other animals to follow, but is constructed with twists and turns, and with underground galleries and side passages, and ends in three separate chambers. Of these, one is their common dwelling-place, the second is the storeroom for their food, and the third is the place in which they lay their dead.

COMMENT: Plutarch's description of ants' behaviour is the most complete of all ancient writers', emphasising those aspects which Greeks and Romans found most praiseworthy: the ants' organisation, consideration for others and concern for their dead. There is an element of wishful thinking to many of their observations, and the ants are often anthropomorphised: the three underground chambers of the nest described here become in Aelian (*On Animals* VI.43) men's and women's quarters, plus a storeroom. Similarly, both Aelian and Virgil describe expeditions to gather grain in military terms: the ants march in ranks like soldiers and are commanded by 'generals'. Most striking are the claims made by several writers about ants' treatment of the dead: Pliny comments that ants are the only creatures apart from humans who bury their dead, and Aelian even suggests that they make coffins for the dead from the husks of grain. Nevertheless, the accounts demonstrate close observation, for example of the way in which ants communicate

with each other when they meet, and the care which is taken of the larvae; Cleanthes' story, while attributing human conceptions and motivations to the ants, indicates the potential for understanding interactions between ant colonies, and many ancient descriptions are in fact borne out by modern investigations of ants' behaviour (see Keller and Gordon 2010).

7. An epitaph for an ant

Greek Anthology VII.209 (*Antipater of Sidon*)

Here beside the threshing-floor, toiling ant,
I have built for you a grave-mound from the thirsty clay,
So that even in death you may delight in Demeter's
Corn-bearing furrow, lying in your chamber of ploughed earth.

COMMENT: The playful intent of this verse is clear: a sophisticated funerary epigram for an ordinary ant demonstrates the poet's skill in elevating so mundane a subject to heroic status. The mention of the threshing-floor, however, places the ant not in the wild, but as a pest of the farmstead: poetic flights aside, Greek and Roman agricultural writers recommend strong measures against ants to prevent their despoiling grain stores. Roman writers describe ants as pests of the threshing-floor (Virgil *Georg.* I.185–6), of grain stores, and sometimes of orchards and gardens (Pliny *NH* XVII.266; Martial XI.18), and their attitude towards such infestations are unhindered by philosophical praise for ants' moral or intellectual virtues: they recommend many forms of insecticide (Beavis 1988: 207–8) and preventative treatment such as coating the threshing-floor with oil or bitumen to make infestations impossible. Another poem in the *Greek Anthology*, IX.438, makes light of the theme, describing ants which ate a jar of stored honey; the farmer set the jar in water to protect it, but the ants sailed across the water on pieces of straw to reach the jar.

8. The greedy farmer who was changed into an ant

Aesop Fables 166 (Perry)

The ant which we know today was once a man; he was not satisfied by farming through his own efforts, but was always gazing enviously at others' fields, and stealing his neighbours' crops. Zeus, angered by his greed, changed him into an ant. But even though his form was altered, he did not change his nature, and to this day he goes about in the fields gathering the fruit of others' labours, and stores them up for himself.

The moral of the story is, that those who have a naturally bad character never change their ways, even if they are severely punished.

COMMENT: In ancient fables the ant almost always stands as the exemplar of hard work and foresight, toiling unceasingly to store up food for the winter (see CRICKET/CICADA no. 5). In this story, however, an alternative view sees the ant as an incorrigible thief, stealing the fruit of others' labours. Given the emphasis on ants' pursuit of grain, such enmity from the farmer is understandable: it has been suggested by Buckland that the 'insect tithe' of grain products in antiquity could be 10 per cent or more (Buckland 1991: 70), and it may be that, as with the cicada, we see a peasant's perspective on the creatures with whom they shared their land.

This tale of metamorphosis is quite unusual among myths: it is paralleled only by the most unlikely tale that Zeus transformed himself into an ant to seduce Eurymedousa, with whom

he had a son named Myrmidon (Clem. Al. *Protr.* 2.34). Far better known is the myth of reverse transformation, in which Zeus created warriors from ants on the island of Aegina, creating the race of the Myrmidons (Hes. fr. 205).

9. Gold-digging ants in India

Herodotus Histories III.102–5

Other Indians live around the city of Caspatyrus and the Pactyican land, dwelling to the North of those I have described, and they are similar to the Bactrians in their way of life. These are the most warlike of the Indian tribes, and they are the ones who collect the gold for their tribute in the following way. Bordering on their territory is a sandy desert, and in this desert there is a type of ant, in size smaller than a dog but bigger than a fox; some of them have been captured and are kept at the palace of the Persian King. These ants excavate their tunnels underground, bringing the sand up to the surface, in just the same way as do the ants in Greece, and they are very similar in appearance. The sand which they cast up contains gold. The Indians go into the desert to collect this sand, each one yoking three camels together, a male camel on a leading-rein on each side, and a female in the middle. Each Indian mounts up on the female camel, having taken care that the female has left a young calf behind at home.

Having prepared their camels in this way the Indians set out to collect the gold, making the raid at the hottest part of the day, when the ants are driven underground by the heat.

When they reach the right place they fill the sacks they have brought with sand and turn for home as fast as they can. The ants scent them immediately, so the Persians say, and pursue them; they are faster than any other creature alive, so much so that if the Indians did not get a headstart on them while the ants were gathering their forces, none of them would escape. The male camels, which are slower than the females, soon start to struggle and are cut loose one at a time, but the females, remembering their calves which are waiting at home, show no weakness. This is how the Indians acquire most of their gold, according to the Persians; some is mined, in much smaller quantities.

COMMENT: No description of ants in the ancient world would be complete without Herodotus' account of the gold-digging ants of India. Fast-moving and ferocious, these creatures can outpace camels and threaten to kill humans. Since 1912 commentators have tried to relate Herodotus' story to some real creature, exaggerated or misunderstood (How and Wells 1912; Jennison 2005: Appendix III; West 1992), but such activity in my view misses the point of the tale. Herodotus' story is meant to evoke the strangeness of the distant East: he has already told his audience about tribes who eat raw fish and wear clothes made of reeds, of cannibal tribes, and others who have neither houses nor agriculture. He notes that animals and birds in India are much larger than in other countries (see SNAKE), and in this context a dog-sized ferocious ant is perfectly credible. Herodotus emphasises that his story is hearsay, and it does, on closer reading, raise some obvious questions: why, if the gold is merely a by-product of their tunnelling, do the ants chase the Indians? Why are the male camels taken along, if they are neither ridden nor loaded, and can simply be left behind? The underlying idea seems to be simply that of disturbing an ordinary ants' nest: the insects come boiling out, and because of their size are that much more threatening. But the story clearly did not originate with Herodotus – it seems to have been a fiction circulated by the Indians to deter outsiders from seeking the source of the gold – and he tells it

to entertain, in just the same way as his account of the griffins of Scythia who also have hoards of gold. The ants proved very popular with subsequent writers and the story is often retold and embellished (Strabo *Geog.* XV.1.44; Arrian *Ind.* 15.4–6; Dio Chrys. 35.23–4): by the time of Pliny, five hundred years later, the ants have grown to the size of wolves and are said to stockpile the gold on purpose (*NH* XI.111). The comment that some specimens of the ant had been caught and were kept in a menagerie by the king (though again Herodotus does not claim to have seen them) emphasises the control of the king over his empire – all creatures, no matter how rare or fierce, are tribute to him.

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
F.S. Bodenheimer, *Animal and Man in Bible Lands* (2 vols) (Leiden 1960).
P.C. Buckland, *The Environmental Evidence from the Church Street Roman Sewer System* (Archaeology of York 14.1) (London 1976).
P.C. Buckland, 'Granaries, stores and insects: the archaeology of insect synanthropy', in F.Sigaut and D. Fournier, *La préparation alimentaire des céréales* 26 (1991), 69–81.
B.J. Collins, 'Animals in Hittite literature', in B.J. Collins (ed.), *A History of the Animal World in the Ancient Near East* (Leiden 2002), 237–50.
M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
T.L. Forti, *Animal Imagery in the Book of Proverbs* (Leiden 2008).
B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 2005).
W.W. How and J. Wells, *A Commentary on Herodotus* (Oxford 1912).
G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repub. 2005).
L. Keller and E. Gordon, *The Lives of Ants*, trans. J. Grieve (Oxford 2010).
D.D. Luckenbill, *Ancient Records of Assyria and Babylonia* (2 vols) (Chicago 1927).
W.L. Moran, *The Amarna Letters* (Baltimore and London 1992).
C. Sleight, *Ant* (London 2003).
H.S. Versnel, 'The poetics of the magical charm: an essay on the power of words', in P. Mirecki and M. Meyer (eds), *Magic and Ritual in the Ancient World* (Leiden 2002), 105–58.
M.L. West, *The East Face of Helicon. West Asiatic Elements in Greek Poetry and Myth* (Oxford 1997).
S. West, review of D. Asheri and S.M. Medaglia (eds), *Erodoti Libro III* (Milan 1990), *CQ* 42 (1992), 276–7.

CRICKET/CICADA

Cicadas and crickets are widespread across the Mediterranean, and ancient writers distinguish clearly between the former (*tettix/cicada*) which lives in the trees and sings in the heat of the day, and the latter (*akris/locusta*) which inhabits the fields and sings in the evening. They were also well aware that neither the cicada nor cricket actually sings, the chirp of the cricket being produced by friction of the back legs on the wings, and the cicada's buzz by vibrating membranes (Ar. *HA* 535b 6–13). In the popular mind, however, these facts were easily confused, and poets frequently refer to the 'song' of the cicada and cricket indiscriminately, comparing them to melodious birds such as the nightingale. In Greece both species were often captured and kept in small cages as musical pets. Interestingly, no extant source comments on this practice in Egypt or the Near East, nor is there any text that praises the cicada's or cricket's 'song'.

The cicada enjoyed a special affection among the Greeks: its song was appreciated as part of a pleasant summer landscape (Plato *Phaedrus* 230c), and it provided an apt metaphor for the chattering old Trojan men in the *Iliad* (Hom. *Il.* III.150–4) and for the litigious Athenians who 'chirp away all year round' in the lawcourts (Ar. *Birds* 39–41). But more than this, the cicada's

behaviour attracted a set of beliefs and myths which gave it particular meaning throughout Greek history. Because the cicada supposedly devoted itself exclusively to making music and possessed a remarkable voice in an unremarkable frame, it was frequently identified with the figure of the poet (e.g. Callim. *Aetia* I.30–5), and became a common poetic theme. It was believed to be able to live without eating, or to feed only on dew, to be ageless and undying, and to be born from the earth – all ideas based on mistaken interpretation of natural behaviour – and thus became identified with the divine, as a creature beloved by the Muses and the subject of several myths of transformation (see below). The grasshopper, on the other hand, attracted no such mythological associations and was treated merely as a wild creature of the fields, appreciated as a pet for its evening song. The Romans, in contrast, show little interest in either cicadas or crickets, with only a few references to their song in the countryside, and those not always very enthusiastic.

Crickets and cicadas were sometimes eaten, even in Greece: poets refer to hunting them with limed twigs (*Greek Anthology* IX.264 and 273), and Aristotle includes in his discussion of the lifecycle of the cicada comments on the seasons in which they are most palatable (*HA* 556b 6–8, 13–15). Pliny (*NH* XXX.68) includes ‘cicadas cooked in a shallow pan’ in a list of remedies for bladder problems.

1. The qualities of the cicada

Anacreontea 34

We call you happy, cicada,
Because from the tops of the trees
Drinking the dewdrops
You sing, happy as a king.
For yours are all those things
That you see in the fields
And all that the seasons bring.
You are beloved of the farmer
For your harmless ways;
You are honoured by mortals,
Sweet proclaimer of summer,
The Muses love you
And Apollo himself
Who gave you your sweet voice.
Old age does not wither you
Wise one, earth-born, lover of song,
Carefree and with bloodless flesh
You are nearly the equal of the gods.

COMMENT: The *Anacreontea* is a collection of lyric poems apparently written by the great Anacreon himself, but in fact most likely written in imitation of his style and subjects during the Hellenistic period. While this may perhaps be rather uninspired as a poem, it touches on many of the poetic ideas about the cicada, which is praised as harmless to the farmer's crops and for its sweet song; it is also said to be both ageless and born from the earth. Writers on natural history understood that cicadas, like grasshoppers, laid their eggs in the soil, from which the young hatched in the spring, but popular beliefs saw the cicada as emerging from the earth by spontaneous generation (Plut. *Mor.* 637b; Lucretius *De Rerum Natura* 5.803). This allowed them

to become a symbol of autochthony: the early Athenians, who prided themselves on their autochthonous origins, wore golden cicadas as ornaments in their hair (Thuc. I.6; Geddes 1987: 307). Aristophanes *Clouds* 984–5 mentions this as an outdated practice in the later fifth century, but the cicada still appears on Athenian coins of the second century BCE, alongside the famous owl (Kleiner 1975: fig. 14). Like the snake, the cicada gained a reputation as ageless because it sheds its skin in the transition to adulthood; some ancients believed that like the snake, it was able to renew itself indefinitely in this way (Aelian *NA* VI.51). The Greek word for the skin husk that is shed (*gēras*) is the same as for ‘old age’, and this, together with the perpetual song of the cicada, fostered the idea of an undying creature. The ‘bloodless flesh’ to which the poet refers extends this idea – mortals must eat to stay alive and replenish their blood, but the gods, who live on ambrosia, have no blood and are not subject to death. The cicada, thought to live only on dewdrops without the need for food, has the same characteristic, and hence approaches the status of the divine (King 1986: 25–6). These ideas come together in the myth of Tithonus, the young musician who was loved by the goddess of the dawn, Eos. She asked Zeus to make Tithonus immortal, but forgot to ask that he also remain eternally young: Tithonus thus grew older and older but could not die, until eventually he was so small and shrivelled that only his voice remained and he turned into a cicada (Davies and Kathirithamby 1986: 126–7).

2. The cicada which helped the poet to win his contest at Delphi

a) *Strabo Geography VI.1*

The river Halex forms the boundary between Rhegium and Locri, passing through a deep ravine, and there is an unusual thing about the cicadas there: those on the Locrian side sing, while on the Rhegian side they are mute. The reason seems to be that the country on this side is heavily shaded, and so because the cicadas are damp they are not able to separate their wing membranes, whereas those on the Locrian side, being exposed to the sun, are dry and horny, so that they easily send forth their song. People used to show in Locri a statue of Eunomos the poet with a cicada sitting on his cithara. Timaeus says that once this Eunomos was taking part in the competition at Delphi, and fell into a dispute with Ariston of Rhegium about the order of performance. Ariston argued that the Delphians should side with him because his ancestors had been priests of Apollo at Delphi, and the colony at Rhegium had been sent from there; Eunomos said that Ariston should not have the right to compete in poetry there, being from a place where even the cicadas, the most tuneful of creatures, were dumb. Nevertheless, Ariston was no less highly esteemed and hoped to win the victory. Eunomos, however, carried off the prize and set up the aforementioned statue in his home state, since during the contest one of the strings of his cithara snapped, and a cicada, settling on the instrument, supplied the missing note with its voice.

b) *Greek Anthology VI.54 (Paulus Silentarius)*

This bronze cicada Eunomos dedicates to Lycorean Apollo
As a memorial of his victory in the garlanded contest.
For in the contest of the lyre he stood up against Parthis;
But when the Locrian shell rang out at the plectrum's stroke
The sounding string of the lyre snapped with a harsh discord.
Before the song's swift harmony could go lame

A cicada settled on the polished cithara,
And lent its voice to supply the missing note,
Fitting its chirping from the wild treetops
To the measure of the sounding lyre.
He honours you, blessed son of Leto, with the gift of your cicada,
Setting the bronze singer upon your cithara.

COMMENT: The phenomenon of mute cicadas was one which fascinated ancient writers: Pliny (*NH* XI.32) claimed that female cicadas did not sing, and several regions or cities of the Greek world were credited with silent or absent cicadas (Beavis 1988). Strabo here attempts to account for the well-known situation in Rhegium and Locri by appeal to scientific principles.

The story of the musical cicada is told several times, by Strabo and Paulus Silentarius here, and in another poem of the *Greek Anthology* (IX.584). While no doubt generated from the appearance of Eunomos' statue in Locri, offering an explanation for the bronze cicada it depicted, the story speaks to the supposed bond between poet and insect. Even the poets realised the miraculous nature of the tale, which supposed that a cicada could both co-operate in this way, and even follow its place in a tune, but it is a further example of the particular connection between the cicada and the divinities of music, in this case Apollo. While the cicada is not very common in religious imagery, we do have a white-ground *phiale* (libation bowl) from Athens on which a clay cicada is modelled as the central feature (Boston Museum of Fine Arts 98.886, from Athens; Davies and Kathirithamby 1986: fig. 26). The siting of the tale in South Italy indicates that positive cultural attitudes towards the cicada extended across the Greek world, in contrast to the Roman disdain for the creature.

3. The cicada and the ants

Aesop 373 (Perry)

In the wintertime, the ants were drying their store of food which had got wet; the cicada, which was hungry, asked them for something to eat. The ants asked the cicada, 'Didn't you gather food through the summer?' The cicada replied, 'I didn't have time; I was singing all day.' The ants laughed, and said, 'Well, if you made music in the summer, then you can dance in the winter!'

The moral of the story is, you shouldn't neglect your affairs, or you run the risk of going hungry.

COMMENT: Aesop's fable exists in several forms, but it always opposes the industrious ants with the heedless cicada. It is obviously unusual to find the cicada characterised as lazy and improvident, rather than as the happy songster of the poetry, but the tale represents a strand of peasant thinking which can also be found in Hesiod's *Works and Days*, also from the archaic period. This ideology emphasises the necessity of hard work to ensure survival in an unpredictable environment, and a sometimes harsh reluctance to waste the fruits of one's labours on the undeserving, and it contrasts with the aristocracy's adoption of the cicada as a symbol (discussed above) representing a life of carelessness ease. Plato's Socrates recounts a myth of the origin of the cicada which has some similar overtones (*Phaedrus* 259b–c): cicadas were originally men who, when the Muses came into being and brought humanity the gift of music and song, were enthralled by it, and gave up all their other occupations to spend all day singing. They did not even stop to eat or drink, and so eventually died of starvation; they were then turned into cicadas and now live only

for song, without taking food or drink. The implication seems to be that the cicada's life of song is all very well for those with plenty, but those who labour would do well to avoid its example.

4. A Roman proverb

Ovid Ars Amatoria 1.271

The birds will sooner not sing in spring, the cicadas be silent in summer, and the Maenalian hound turn his back on a hare, than a woman will resist the compliments of a young man.

COMMENT: Like the Egyptians, the Romans were less interested in cicadas and crickets than the Greeks: they are mentioned less often as components of the summer landscape and rarely form a topic of poetry. The reasons for this are clearly cultural; while the Roman Empire had a wider ecological reach than the Hellenic world, cicadas are indigenous to Italy, and the Romans had ample opportunity to become as fond of them as the Greeks of Southern Italy. Yet Roman writers describe the sound of the cicada in much more negative terms than the Greeks – Virgil, for instance, refers to them as *rauci*, hoarse (*Ecl.* II.13) and *querulae*, shrill (*Georg.* III.327) – and are more likely to include birdsong as the audible component of a landscape than the chirp of a cicada or cricket. They tend to figure, as here, only as a proverbial and rather annoying symbol of summer (*Juv.* IX.69). The scattered references which we find indicate a sense of disdain: Plutarch records in his *Life of Sulla* (7.6) that as the Senate was deliberating in the Temple of Bellona, a sparrow flew in carrying a cicada, dropped part of the insect and flew away again. This omen was interpreted to foretell conflict between rich and poor, the sparrow representing the wealthy classes and the noisy cicada the city mob. Similarly in Pompeii a humorous mosaic depicts a cicada coachman driving a wagon pulled by a parrot (Jashemski and Meyer 2001: fig. 269).

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
E.K. Borthwick, 'A grasshopper's diet: notes on an epigram of Meleager and a fragment of Eubulus', *CQ* 16 (1966), 103–12.
M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
R.B. Egan, 'Two complementary epigrams of Meleager (A.P. vii 195 and 196)', *JHS* 108 (1988), 24–32.
A.G. Geddes, 'Rags and riches: the costume of Athenian men in the fifth century', *CQ* 37 (1987), 307–31.
W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001).
H. King, 'Tithonus and the tettix', *Arethusa* 19 (1986), 15–35.
E.S. Kleiner, *Greek and Roman Coins in the Athenian Agora* (Princeton 1975).
H.G. Larew, 'Insects: evidence from wall paintings, sculpture, mosaics, carbonized remains, and ancient authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 315–26.

LOCUST

For philologists and anthropologists alike, the task of distinguishing between locusts, grasshoppers, crickets and cicadas can be exasperating, as a word which usually denotes 'locust' might, depending on context, refer to a grasshopper or vice versa. Adding to the confusion is the vast variety of grasshopper species that exist in nature. In scientific taxonomy locusts and grasshoppers are not different insects: locusts simply comprise a *genus* of grasshoppers and are often large, with a

tendency to mass together, whereas grasshoppers are more solitary (Siebeck 2005: 38–9). In the Hebrew bible alone there are eleven words rendered as ‘locust’ and ‘grasshopper’; even cicadas, of another insect order, may be called ‘locusts’. Over twenty words for ‘locust’ and ‘grasshopper’ have been found in Akkadian, one of the primary Semitic languages of Mesopotamia. This rich (if confusing) vocabulary suggests that these insects were familiar in the daily life of the ancient Near East. What is unclear is whether the range of vocabulary refers to different species of grasshoppers and locusts or to different stages in the insects’ lives.

Surprisingly, Near Eastern sources do not display any form of affection for, or appreciation of, grasshoppers and locusts. While grasshoppers are sometimes depicted in Egyptian landscape scenes and faience figurines with skill and delicacy, there are no texts which allude to, for instance, their distinctive pleasant chirping. Near Eastern texts focus instead on the destructive forces of mass swarms of locusts, not surprising perhaps given that the species known to intrude most into the Middle East, and the one most likely feared in antiquity, was the desert locust (*Schistocerca gregaria*). The female of this species lays her eggs just below the surface of the soil to await the moist conditions that will indicate plentiful food is available for her hatchlings. Locusts are normally solitary, but the trigger for swarming behaviour is proximity: if a locust touches another more than four times an hour it triggers a reaction as they turn from brown to yellow and enter the swarming phase. Once swarming, the winged adults can cover over a hundred miles a day to reach the best feeding grounds.

The Greek word for locust, *akris*, also referred to the grasshopper and cricket, and Greek writers, like their Near Eastern counterparts, understandably often fail to distinguish clearly between the different species of insect. The Latin *locusta* refers more narrowly to the destructive swarming locust. Locusts were native to both Greece and Italy, as Aristotle’s discussion of the breeding habits indicates (*HA* 555b 18–556a 14), but in these regions they retained their solitary nature; some sources refer to them as local pests, especially of vineyards (Ar. *Birds* 588; Theoc. *Id.* 5.108–9), but they were not seriously problematic to agriculture in this phase. Only when they entered a swarming phase, most commonly in Africa, and began to migrate did their incursions become the fearsome and destructive events familiar from ancient accounts. Because they devoured both growing crops and grazing land over a wide area, multiplying as they ate, locusts brought disaster to whole communities, wiping out harvest and animals alike. While most accounts of locust infestations in antiquity are from Asia Minor and Italy, swarms were known across most parts of the classical Mediterranean world, as far north as Gaul, Illyria and Germany; modern studies indicate that it is quite possible for swarms of desert locusts to be carried by prevailing winds (as Pliny describes below) far into northern Europe. In the face of such incursions the ancients had few defences, and it is unsurprising that the sudden appearance of a locust swarm was usually interpreted as a sign from the gods. Folklore offered methods of deterring a locust swarm when it appeared overhead, including having the population hide indoors so that the locusts would think the area deserted, tying bats to the tops of trees (Beavis 1988: 75), or using amulets and spells (Pliny *NH* XXXVII.124; Andrews 1994: 66), but the sources below record more practical methods taken once such deterrence had failed.

Although widely eaten in the Near East (see below), the locust was not considered an inviting food in Greece or Rome: geographical writers use the eating of locusts as a marker of barbarianism among the African and Indian peoples they describe (Hdt. IV.172; Diod. III.29.1; Strabo *Geog.* XVI.4.12).

1. A locust plague in Egypt

Hebrew bible, Exodus 10.12–19

And Yahweh said to Moses, ‘Stretch out your hand over Egypt so that locusts swarm over the land and devour everything growing in the fields, everything left by the hail.’ So Moses stretched out his staff over Egypt, and Yahweh made an east wind blow across the land all that day and all that night. By morning the wind had brought the locusts; they invaded all Egypt and settled down in every area of the country in great numbers. Never before had there been such a plague of locusts, nor will there ever be again. They covered all the ground until it was black. They devoured all that was left after the hail – everything growing in the fields and the fruit on the trees. Nothing green remained on tree or plant in all the land of Egypt. Pharaoh quickly summoned Moses and Aaron and said, ‘I have sinned against Yahweh your God and against you. Now forgive my sin once more and pray to Yahweh your God to take this deadly plague away from me.’ Moses then left Pharaoh and prayed to Yahweh. And Yahweh changed the wind to a very strong west wind, which caught up the locusts and carried them into the Red Sea. Not a locust was left anywhere in Egypt.

COMMENT: The Hebrew bible likes to interpret the devastation caused by a plague of locusts as the direct punishment of Yahweh (Deuteronomy 28. 42; 2 Chronicles 7.13). The prophet Amos (4.9), for instance, declares that, ‘Many times I struck your gardens and vineyards, destroying them with blight and mildew. Locusts devoured your fig and olive trees, yet you have not returned to me.’ The Exodus story of the locust plague in Egypt (the eighth of ten natural disasters sent by Yahweh to devastate that country) is therefore part of a much longer tradition of using this insect as a tool of divine vengeance. The locust was clearly linked to the theology of Israel and Yahweh showed his displeasure in many ways, including a plague of locusts.

Not surprisingly, ancient Near Eastern texts frequently refer to the destructive nature of vast swarms of locusts, while the insects are used as metaphors and similes to express great numbers. The Hebrew prophet Nahum (3.15–16) thus notes that the number of merchants plying their trade in Israel, ‘are . . . like locusts – they strip the land and then fly away’ and that, ‘they will devour you like a swarm of locusts, multiply like grasshoppers, multiply like locusts!’ The Assyrian king Sennacherib’s account of this eighth Elamite campaign takes delight in stating that the number of captive men, women and livestock herded back to Assyria as war booty ‘were more numerous than locusts’ (Luckenbill 1927: 811).

In Egypt, the locust or grasshopper hieroglyph (*snehem*) simply refers to the insect itself, although when used as a determinative it appears to mean ‘great numbers of individuals’: for example, on a wall in the mortuary temple of Ramses III at Medinet Habu an inscription reads: ‘battalions will come like the locusts’. In his Kadesh inscriptions, Ramses II used the locust image to describe the armies of his Hittite foes: ‘They covered the mountains and valleys and were like locusts in their multitude’ (Lichtheim 1976: 64) and in the Old Kingdom Pyramid Texts (Hymn 467) the flight of the locust swarm is so dense that it even hides the sun (Faulkner 1969). One Egyptian farmer laments that having paid his harvest-tax, ‘the locust descends [and] the cattle devour’ (Papyrus Anastasi V & Sallier I; Caminos 1954: 247), but it is the First Intermediate Period nomarch Ankhtifi who uses the locust simile most effectively when he describes the Egyptian people in their desperate search for food during a devastating famine: ‘The whole country has become like locusts going upstream and downstream’ (Lichtheim 1976: 85).

2. An invasion of locusts

Hebrew bible, Joel 1.4, 6–7, 10–12, 2.1–11

What the locust swarm has left
the great locusts have eaten;
what the great locusts have left
the young locusts have eaten;
what the young locusts have left
other locusts have eaten. . .
A nation has invaded my land,
a mighty army without number;
it has the teeth of a lion,
the fangs of a lioness.
It has laid waste my vines
and ruined my fig trees.
It has stripped off their bark
and thrown it away,
leaving their branches white. . .
The fields are ruined,
the ground is dried up;
the grain is destroyed,
the new wine is dried up,
the olive oil fails.
Despair, you farmers,
wail, you vine growers;
grieve for the wheat and the barley,
because the harvest of the field is destroyed. . .
Let all who live in the land tremble. . .
[for] a day of darkness and gloom [is coming],
a day of clouds and blackness.
Like dawn spreading across the mountains
a large and mighty army (i.e. of locusts) comes,
such as never was in ancient times
nor ever will be in ages to come.
Before them fire devours,
behind them a flame blazes.
Before them the land is like the garden of Eden,
behind them, a desert waste—
nothing escapes them.
They have the appearance of horses;
they gallop along like cavalry.
With a noise like that of chariots
they leap over the mountaintops,
like a crackling fire consuming stubble,
like a mighty army drawn up for battle.
At the sight of them, nations are in anguish;
every face turns pale.

They charge like warriors;
they scale walls like soldiers.
They all march in line,
not swerving from their course.
They do not jostle each other;
each marches straight ahead.
They plunge through defences
without breaking ranks.
They rush upon the city;
they run along the wall.
They climb into the houses;
like thieves they enter through the windows.
Before them the earth shakes,
the heavens tremble,
the sun and moon are darkened,
and the stars no longer shine. . .
The Day of the Lord is . . . dreadful.
Who can endure it?

COMMENT: The Hebrew prophet Joel provides a vivid and terrifying image of a plague of locusts and he may well have composed his verses from personal observation (Crenshaw 1995: 91–126). It is one of the most intense descriptions of a locust swarm from any period of history. Opinion is divided on Joel's categorisation of the locusts in his opening verses as to whether he refers to different stages in their physical development or to different species (an Assyrian hymn (below) has interesting parallels with Joel's opening verses). Joel uses a familiar Near Eastern simile as he compares the locust plague to an invading army, but he also likens the locusts to other animals, and the devouring power of their jaws are compared with lions' fangs. Because each member of this particular army can consume its own weight in food each day, Joel says that a land which once resembled the Garden of Eden is quickly turned into a wilderness by their hunger.

3. Sargon II's Hymn to Nanaya

Akkadian text, State Archives of Assyria 3, 13–16, no. 4 (Livingstone 1989)

The evil locust which destroys the crop,
the wicked dwarf-locust which dries up the orchards,
which cuts off the regular offerings of the gods and goddesses—
(Indeed) Ellil listens to you, and Tutu is before you—
may by your command it be turned into nothing.

COMMENT: As with Joel's text above, this royal hymn lists at least two types of locust, which here appear distinct species and not developmental stages. Given that locust plagues were often regarded as punishments from the gods, it is no surprise to find that prayers and hymns were composed to avert this disaster. A votive relief dating to c. 715 BCE shows a worshipper standing in front of the god Shamash while above his head a locust is depicted; it is presumably there to placate the god, perhaps as a thank-offering for the prevention of a plague. Here an Assyrian royal prayer hopes to prevent such a plague and it notes that the locusts listen directly to the gods and that Nanaya, the goddess of war, wisdom and motherhood, has a special relationship

with the insects and can also persuade the other gods to look benevolently upon humankind. Within the prayer, a veiled threat is implied: if locusts attack the crops, then the gods too will suffer since they will not receive the food offerings they demand; diverting locust plagues is therefore good for the gods too. Equally, the Assyrians used locust plagues in their curses. In one Akkadian curse tablet, Esarhaddon calls upon the god Adad, 'the canal inspector of heaven and earth', to destroy enemy lands: 'may locusts which diminish the produce of the land devour your crops'. Assyrians also incorporated locusts into their omens. One states, 'If the inner side of the liver is curved at the spot (which indicates) devastation by locusts, there will be pestilence in the prince's country.'

4. Ditch-digging and threats of a plague of locusts

Aramaic document from Bactria (after Shaked 2004: 28 document A4)

On behalf of Akhvamazda to Bagavant. And now concerning what you sent to me, saying:

'[A message] was sent to me on your behalf, (instructing me) with the order to build a wall and a ditch around the town of Nikhšapaya. Then I fixed the time a made the troop (of workers?) approach. Yet Spaita, the magistrates, and (certain) others of the garrison of the place came to me saying, 'There are locusts in great number and in thickness and the harvest is ready for collection. If we build this wall the locusts will plague this town and will bring great harm [...] in the country.' Me, I do not have the authority to let them go through with it and [another] affair. . . ' [And now] the troop who was needed . . . I have let go so that they may crush the locusts so that they can collect the harvest. When the time comes they will build the wall and the ditch.

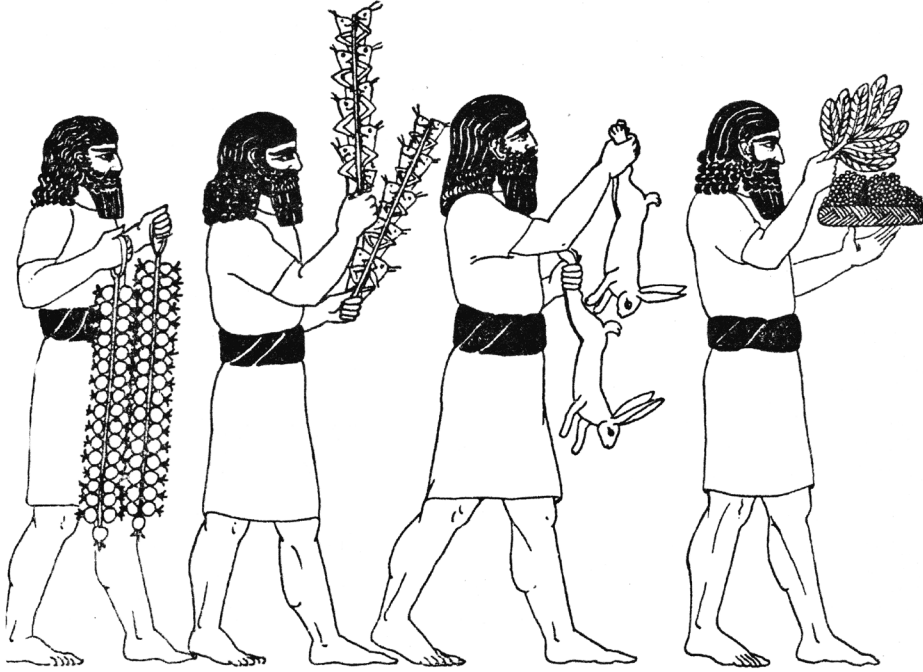
Daizaka the scribe knows this order.

To Bagavant who is at Khulmi. 3 day Sivan [regnal year] 7 of Artaxerxes. The subject of Akhvamazda. You bring this letter.

COMMENT: An exceptional series of Aramaic texts from the important (but understudied) satrapy of Bactria offer a rare glimpse into the workings of a distant part of the Persian Empire (Shaked 2004). This particular administrative text notes that structural defence work to the city wall of Nikhšapaya is currently delayed since digging a ditch at the foundations might disturb the locusts which are currently on the ground, causing them to take flight and destroy the crops. The text implies that these locusts are still hoppers and thus less mobile and easier to destroy. The administrator, Akhvamazda, therefore recommends that his superior, Bagavant, holds off any building works and sends the troops to crush the locusts under foot while they are still in the fields to avoid any swarm formation. In an earlier period, a Sumerian text from Mari reveals that a similar action came too late: 'Because of the locusts, my district could not harvest anything' writes one local administrator to his overlord (Jean 1942: 71.1.5).

5. Locusts being carried to a feast to celebrate
the Assyrian defeat of the Elamites

Line-drawing of a relief from the palace of Ashurbanipal at Ninevah



COMMENT: Locusts have been eaten in the Middle East for millennia (Siebeck 2005: 46–52) and this relief, dating to c. 669–27 BCE, depicts Assyrian servants bringing honey, fruits, hares and locusts skewered on to sticks for the king's guests to eat. The Assyrians and Babylonians considered these insects to be a great delicacy and their desirability is attested to by several royal decrees demanding that locusts be sent to the royal table. One loyal servant named Rimutte writes to the court of Sargon II stating that,

They wrote to me from the Palace: 'Write down all the locusts that you collect and all that you kill, and send (the information) to the Palace!' Now then I am writing it down and sending it to my lord . . . When they were few, we collected them [and] pushed them into a *seah* measure and measured them with it; when they became oppressing, we just killed them in the middle of the field. Let my lord make this known to the Palace. I and Ilu-iqbi, [we] killed them together.

(Parpola 1987: no. 221)

Another text declares that, 'Locusts often come to Teqa and the day they arrived the heat was torrid so they did not alight. But all the locusts that were taken I have sent to my lord' (Aynard 1972: 60). The Mesopotamians prepared a specially fermented sauce known as *šiqqu* out of fish, shellfish and locusts.

Locusts are a very rich source of protein, fat and calories and dried locusts contain more than 50 per cent protein; therefore when John the Baptist lived on a diet of 'locusts and wild honey' (Matthew 3.4; Mark 1.4–6), he was benefitting from a basic but nonetheless balanced diet. The Mosaic dietary regulations permitted the Jews to eat locusts and grasshoppers because they were not regarded as six-legged insects: 'there are some winged creatures that walk on all fours that you may eat; those that have jointed legs for hopping on the ground' (Leviticus 11.21).

6. Achilles scatters the Trojans like locusts

Homer Iliad XXI.12–16

As before a raging fire the locusts rise up,
fleeing to the river, and the untiring fire blazes
driving them on suddenly, and the locusts flee into the water;
so before Achilles' charge the stream of deep-whirling Xanthos
was filled with the confusion of men and horses mingled together.

COMMENT: This vivid simile describes the panicked Trojans fleeing before the raging Achilles like a swarm of locusts pursued by fire. It is the earliest reference to locusts in classical literature, and indicates that invasive swarms were familiar in Greece from the Dark Ages and before. It gives a clear sense of the swarming numbers of insects; the fire described here may represent an attempt to create firebreaks to protect particular areas from the locusts, but the sense of pursuit and the locusts' desire to reach the water suggest a more aggressive action, perhaps attempting to drive the swarm away by sacrificing some of the vegetation, although such an approach risked as much harm as the swarm itself.

7. A locust swarm in Apulia

Livy XLII.10.7–8

So great a swarm of locusts was suddenly carried from the sea into Apulia that they covered the fields far and wide with their numbers. Gnaeus Siculus, the praetor-designate, was sent into Apulia with *imperium* to deal with this plague which threatened the crops; he gathered a huge troop of men to collect the locusts, and spent considerable time in doing so.

COMMENT: Livy describes several other occasions in his *Histories* (XXX.2.10, XLII.2.5) on which swarms of locusts appeared in parts of Italy and devastated the crops; such events seem to have been recorded in the priestly annals which he used as source material, because they were interpreted as an omen or a sign of divine displeasure requiring expiation. On this occasion in 173 BCE the locusts had clearly arrived in southern Italy from Africa, and the potential for famine was so acute, not only in Apulia itself but also in Rome which relied on Italian agriculture, that the Senate intervened, appointing a magistrate with *imperium* to grant him the authority to commandeer men and resources in the imperilled region. Sentius adopted the labour-intensive approach of collecting (and presumably killing) the locusts by hand, less destructive than fire, but requiring the ability to invoke large-scale organisation.

8. The Roman understanding of locusts

Pliny Natural History XI.35

In India they say that there are locusts three feet long, the legs and thighs of which can be dried and used as saws. There is another way in which they die: when a swarm of locusts is caught up by the wind and falls into the sea or a lake. This happens by chance, not – as earlier writers think – because their wings are made wet by the night-time dew. The same writers suppose that locusts do not fly at night because of the cold, not realising that they fly long distances across the sea, driven by hunger, for several days at a time – a remarkable thing – knowing that they need to seek their food abroad. A plague of locusts is believed to be a sign of divine disfavour; for they are seen to be so large, and their wings as they fly make such a noise, that they are thought to be birds, and they blot out the sun, so that people look up anxiously in case they settle on their lands. Their strength is such that, although they have crossed a great stretch of sea, they infest huge swathes of the land and cover it in a cloud, bringing disaster for the crops, burning up the vegetation with their touch and gnawing away everything, even the doors of the houses.

Locust swarms infest Italy, coming mainly from Africa, and the Roman people have often been forced to consult the Sibylline Books for remedies, in fear of famine. There is even a law in Cyrenaica that they must wage war on the locusts three times each year, first by crushing their eggs, then the larvae, and finally the adults, with the penalty of a deserter for those who neglect the task. Similarly on the island of Lemnos there is a certain fixed measure of dead locusts which each man must bring to the magistrates. And for the same reason they keep jackdaws which fly to meet the locusts and kill them. In Syria too, killing locusts is required by military order. Thus locusts are a scourge to so many parts of the world; but among the Parthians even these are considered good to eat.

COMMENT: Pliny's discussion of locusts in the *Natural History* draws on previous authorities, particularly Aristotle, but he is keen to add his own observations and interpretations. Some of what he says is confused or wrong, especially about their life cycle (in the passage immediately preceding this), but he provides an excellent illustration of the size of the swarms which arrived periodically in Italy and the fear of those who encountered them. He describes a further method of combatting locusts, apart from relying on the weather to drive them away: encouraging birds as natural predators. Pliny's account of the jackdaws at Lemnos is expanded by other writers: Aelian (*NA* III.12) says that they were considered valuable because they ate the locusts' eggs and young, and so were fed at public expense, not only in Lemnos but also in Thessaly and Illyria, and Plutarch (*Mor.* 380f) tells the same story about the Lemnians, though identifying the birds as larks. These latter accounts suggest a natural year-round relation between predator and prey, but Pliny implies that the jackdaws arrive specifically in response to the appearance of a locust swarm. A flock of birds appearing suddenly obviously lends itself to an interpretation of divine intervention, and this underlies Pliny's description earlier in his work (X.39) of the birds called *seleukides* which come in a flock in answer to the people's prayers at Mount Cadmos in Phrygia: the *seleukides* are, he says, never seen unless they come to deal with the locusts. Aelian (XVII.19) relates the same story, but places it further to the East in Galatia. It is notable in these accounts that Lemnos is the place from which anti-locust measures are most often recorded, and the implication of the comments about locust eggs is that swarms were indigenous to the island.

Pliny's assertion that Indian locusts were so big that their legs could be used as saws is interesting for its observation of the serrated form of the locust's hind feet (see Davies and Kathirithamby 1986: fig. 30), and is evidently also part of the common belief that animals in far regions were larger and stronger than domestic ones (cf. ANT). Three-foot-long locusts would indeed be alarming though fortunately impossible in nature, but Aelian (X.13) offers the more reassuring fact that Arabian locusts are beautifully patterned in gold.

9. The gods intervene against locust swarms

Pausanias Description of Greece I.24.8

Opposite the sanctuary is a bronze statue of Apollo, which they say is a work of Pheidias: it is called Apollo Parnopion, because they say the god drove a swarm of locusts which was ravaging their fields out from the country. They know that he drove the locusts out, although they do not say how. But I know that on three separate occasions locusts have been destroyed on Mount Sipylus, each in a different way: one swarm was swept away by a strong wind, another was caught and killed in a great heat after rain, and the third was destroyed by sudden cold.

COMMENT: In his description of the monuments to be seen on the Acropolis of Athens, Pausanias notes the statue of Apollo called 'Parnopion', Apollo of the Locusts. There are references to gods who protect against locusts in several Greek states: Strabo names Herakles Cornopion who is worshipped in Oetaea (in Thessaly), who once rid the city of locusts, and Apollo Pornopion who was worshipped in Aetolia in Asia Minor (*Geog.* 13.1.64). These were most likely local gods who originated as protectors of crops and were subsequently identified with Olympian deities. Similarly, a statue of Mercury found in Cilicia and dating from the Roman imperial period carries an inscription asking Mercury to drive the locust swarms away from that place (Horden and Purcell 2000: 417–18). Given the limited action that could be taken against locust depredation it is hardly surprising that divine aid should be invoked, and Pausanias gives some examples of how natural events that killed the locusts might be interpreted as the intervention of the god. Wind or extremes of heat or cold would drive away the insects, although the three instances which he cites here occurred in Asia Minor, near Smyrna, rather than in mainland Greece.

Bibliography

- C. Andrews, *Amulets of Ancient Egypt* (Austin 1994).
J.M. Aynard, 'Animals in Mesopotamia', in A.H. Brodrick (ed.), *Animals in Archaeology* (New York 1972), 42–68.
I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
R.A. Caminos, *Late Egyptian Miscellanies* (Oxford 1954).
J.L. Crenshaw, *Joel. A New Translation with Introduction and Commentary* (New York 1995).
M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
R.O. Faulkner, *The Ancient Egyptian Pyramid Texts* (Oxford 1969).
P. Horden and N. Purcell, *The Corrupting Sea: a study of Mediterranean history* (Oxford 2000).
C.F. Jean, 'Lettres de Mari IV transcrites et traduites', *Revue d'Assyriologie* 42 (1942), 70–5.
M. Lichtheim, *Ancient Egyptian Literature. Volume II. The New Kingdom* (Berkeley 1976).
A. Livingstone, *Court Poetry and Literary Miscellanea* (Helsinki 1989).
D.D. Luckenbill, *Ancient Records of Assyria and Babylonia* (Chicago 1927).
S. Parpola, *The Correspondence of Sargon II, Part I: letters from Assyria and the West* (State Archives of Assyria 1) (Helsinki 1987).
H.W.F. Saggs, *Everyday Life in Assyria and Babylon* (London 1965).

S. Shaked, *Le satrape de Bactriane et son gouverneur. Documents araméens du IV^e avant notre ère provenant de Bactriane* (Paris 2004).

M. Siebeck, *The Diet of John the Baptist* (Tübingen 2005).

UN Desert Locust Information Service (<http://www.fao.org/ag/locusts/en/info/info/faq/index.html>).

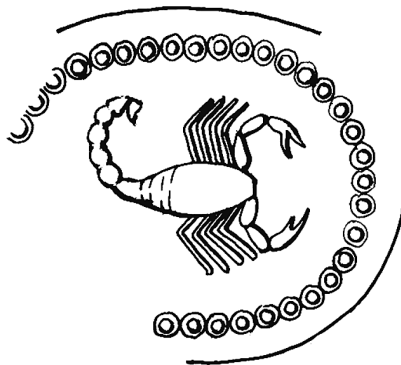
SCORPION

Scorpions are not properly insects, but belong, together with spiders, mites and ticks, to the *Arachnidae*. Scorpions feed mostly on insects for which they lie in wait, stinging them and injecting them with a venom contained in the tip of the tail. Widespread across the ancient world, they vary in the danger which they pose to humans: those in Italy, as Pliny (*NH* XI.89) notes, are harmless, as are some of the African and Near Eastern species. But to the ancients all scorpions were equally dangerous, believed to be the most significant poisonous creature after the snake. Because (as with all insects) accurate observation of their lifecycle was very difficult, the use of their sting in hunting was not known – scorpions were thought to eat earth or grass (*NH* X.198; *Nic. Ther.* 782–5) – and hence their stinging in self-defence was interpreted as deliberate malevolence, the scorpion existing solely to cause harm to humans and their animals. It was proverbial for lurking hidden, looking for an opportunity to strike (*Athen.* 695d), and these beliefs carried over into Christian writers, who tend to couple the scorpion and snake as representatives of evil. Tertullian, writing in the third century CE, uses the scorpion as an extended metaphor for those who threaten Christianity in his *Scorpiace*.

The ancients liked to frighten themselves with stories of extra-large, extra-venomous or even flying scorpions, located in suitably distant lands, and also related tales of whole peoples driven out from their territory by scorpion invasions (*Diod.* III.30.1–2; *Strabo Geog.* XVI.4.12). Scientific writers made some progress in describing their reproduction, though these too include lurid details of either the parent devouring their offspring (*NH* XI.91), or the young scorpions killing their parent (*Ar. HA* 555a 24–5), but most people nevertheless retained the belief that scorpions were produced by spontaneous generation from crabs or crocodiles (*Ovid Met.* XV.370; *Ael. NA* II.33).

1. An Assyrian image of a scorpion

Clay uninscribed stamp seal-impression depicting a scorpion within a guilloche border, c. 800 BCE (London, British Museum 50772)



COMMENT: Even though scorpions vary in size and colour, the outline of this small animal, with its heavy pincers and forward-curving tail with stinger, is distinctive. It is a very well-observed representation: the scorpions of the Middle East are usually around six centimetres long with a short cephalothorax bearing a powerful pair of jaws, two long limbs terminating in pincers and four pairs of legs. The rest of the body consists of the abdomen, a broad part continuous with the cephalothorax, and a slender part forming the long tail which terminates with the sting. The tail is usually carried curved over the back and is used for stinging the prey into insensibility.

This scorpion seal-design (which bears no inscription) was probably chosen as a symbol of authority for the seal's owner; the image of the venomous creature demands respect (see further images of scorpions on royal boundary stele in Keel 1978: 98). In the Hebrew bible the scorpion is employed as an image of danger and pain (Ezekiel 2:6), and so when the Israelite king, Rehoboam, was recorded as telling his people that 'my father scourged you with whips, I will scourge you with scorpions' (1 Kings 12.13–14; 2 Chronicles 10.11, 14), he was no doubt referring to a multiple-thonged whip ending in metal hooks which was perfect for lacerating the flesh.

An Akkadian apotropaic ritual text intended to avert bad omens, and meant to be spoken whilst incinerating an actual scorpion, contains a brief but vivid portrayal of the creature; it is called a 'Wolf of the bedroom; [a] lion of the storeroom' and is described as having 'horns [which] are pointed like those of the wild bull; its tail is turned back like that of the mighty lion' (Scurlock 2002: 362; Foster 2005: 993). Another brief spell describes the scorpion as, 'green in the thornbush, silent in the sand, venomous in the brickmould' (Foster 2005: 993).

Not surprisingly, giant scorpion hybrids, like the so-called scorpion-man (*girtablilu*), with its human body and scorpion tail, are commonly found in Mesopotamian myth and apotropaic imagery (Green 1985). A particularly grotesque scorpion-human hybrid is found on a limestone stele in the form of a boundary-stone from Sippar, south Iraq dating to the reign of Nebuchadnezzar I, c. 1120 BCE (London, British Museum 90858; De Meyer 1980: 101).

2. Death by scorpion

Sandstone stela from Abydos, Middle Egypt, 8 CE (Berlin, Neues Museum 2134; after Tod 1939: 56)

(The tomb) of Kleopatra daughter of Menon. Farewell [. . .], you who have perished ingloriously and indiscriminately by a violent death, unworthily of your goodness; for stung by a scorpion in the sanctuary of Thripis by the hill on the 10th day of Thoth in the 38th year at the 5th hour, she passed away on the 11th.

COMMENT: There are numerous texts from Greco-Roman Egypt which allude to individuals dying as the result of a scorpion sting. Greek-period mummy-labels in particular record this type of death with alarming regularity while other examples of inscribed stone stele, just like the one here which commemorates the death of Kleopatra, the daughter of Memnon, are also known. The details of her death are exact: Kleopatra was stung by a scorpion at the fifth hour on the tenth day of Thoth in the 38th year of the reign of the Emperor Augustus, i.e. on September 7, 8 CE, and died on the following day. The speed with which the venom did its work intensifies the tragedy of the death of the young woman. Aelian reports (*NA* X.23) that the sting of a particularly large and venomous species of scorpion found in the neighbourhood of Coptos in Middle Egypt was immediately fatal, and Pliny maintains (*NH* XI.86) that for virgins the scorpion's sting was invariably (and for mature women generally) deadly; men died, however, only if stung in

the early morning, when the scorpion's poison is at its full strength. Not surprisingly, numerous amulets containing incantations to ward off scorpion attacks have been discovered throughout Egypt. A typical spell, found rolled up inside an amulet (and dating to the early Christian era), reads: 'Salamantarchi. I bind you, Scorpion . . . Preserve this house with those who dwell therein from all evil, from all witchery of spirits of air and the human eye and dreadful pain and bite of scorpion . . . for the name of God most High' (Tod 1939: 58).

3. Selket, the scorpion goddess of Egypt

XX Dynasty tomb relief, Valley of the Queens



COMMENT: The obvious dread that the Egyptians had for scorpions helps explain the importance of the powerful and popular goddess Selket (Serket) who was often depicted as a beautiful woman with a scorpion on her head or, more disturbingly, as a scorpion with the head and torso of a human female (El-Hennawy 2011).

The full form of Selket's name, *Selket hetyt*, translates as 'She who tightens the throat', although an alternative reading can be 'She who causes the throat to breathe' – so, as well as stinging the unrighteous, Selket was a deity who could cure scorpion stings and the effects of other poisons inflicted by insects and reptiles. Originally the goddess was worshipped in the Delta, but her cult spread rapidly throughout Egypt, with cult centres at Djeba and Per-Serget and, although she had no official cult temples, unsurprisingly her priests, who tended to be doctors and magicians, were widespread throughout the land. As the guardian of one of the canopic jars (which held the visceral organs of the deceased) and as a protector of the dead, Selket gained a strong association

with Isis, Nephthys and Neith who performed similar functions, and eventually began to merge her aspects with those of Isis (Lesko 1999); in fact, the majority of magical spells against scorpion stings evoke Isis rather than Selket (see below).

4. Incantations, magic, and protection against scorpions

Late Period Egyptian texts (Book of Legends of the Gods and The Narrative of Isis, after Wallis Budge 1912; Pritchard 1969: 13–14)

Hail, Re, come to your daughter! A scorpion has stung her on a lonely road. Her cry has penetrated the heights of heaven, and is heard along the paths. The poison has entered into her body, and circulates through her flesh. She has set her mouth against it; truly the poison is in her limbs. . . Words to be spoken over an image of Amun and of Horus-Of-Praise and a figure of Isis:

PAINTED (ON) THE HAND OF HIM WHO HAS THE STING AND LICKED OFF BY THE MAN OR DONE SIMILARLY ON A STRIP OF FINE LINEN, PLACED AT THE THROAT OF HIM WHO HAS THE STING – IT IS THE WAY OF CARING FOR A SCORPION POISON (OR) IT MAY BE WORKED UP WITH BEER OR WINE AND DRUNK BY THE MAN WHO HAS A SCORPION BITE. IT IS WHAT KILLS THE POISON – REALLY SUCCESSFUL A MILLION TIMES.

I came forth [from the dwelling] at the time of evening, and there came forth the Seven Scorpions which were to accompany me and to strike (?) for me with [their] stings. Two scorpions, Tefen and Befent, were behind me, two scorpions, Mesetet and Mestetef, were by my side, and three scorpions, Petet, Tjetet, and Maatet, were for preparing the road for me. I charged them very strictly, and my words penetrated into their ears: 'Have no knowledge of [any], make no cry to the Tesheru-beings, and pay no attention to the son of a man (i.e., to anyone) who belongs to a man of no account,' [and I said,] 'Let your faces be turned towards the ground [that you may show me] the way.' So the guardian of the company brought me to the boundaries of the city of Pa-Sui, the city of the goddesses of the Divine Sandals, [which was situated] in front of the Papyrus Swamps . . . Then Isis placed her two hands on the child in order to make to live him whose throat was stopped, [and she said], 'O poison of the scorpion Tefent, come forth and appear on the ground! You shall neither enter nor penetrate [further into the body of the child]. O poison of the scorpion Befent, come forth and appear on the ground! I am Isis, the goddess, the lady of words of power, and I am the maker of words of power (i.e., spells), and I know how to utter words with magical effect. Hearken to me, O every reptile which possesses the power to bite (i.e., to sting), and fall headlong to the ground! O poison of the scorpion Mesetet, make no advance [into his body]. O poison of the scorpion Mestetef, rise not up [in his body]. O poison of the scorpions Petet and Tjetet, penetrate not [into his body]. [O poison of] the scorpion Maatet, fall down on the ground.'

COMMENT: Not surprisingly, given their common appearances in Egypt, scorpions enter frequently into Egyptian mythology and, subsequently, into prayers, spells, incantations and curses. A section of the *Book of Legends of the Gods* shows the effect of a scorpion sting, which can induce paralysis. Given the association between the goddesses Selket and Isis, the Late Period *Narrative of*

Isis centres on the figure of Isis herself alongside her seven scorpions who, whenever the goddess left her infant son Horus in the papyrus swamps where they were in hiding, accompanied her movements. One night, as Isis was travelling along a road, a wealthy noblewoman saw the strange party approach and quickly shut the door to her house. The scorpions were enraged at this rude behaviour and decided to punish the woman. Six of them gave their individual poisons to Tefen who loaded his stinger with it and crawled under the door of the noblewoman's house and stung her son. Hysterical, the woman searched through the town looking for help for her child who was on the verge of death. Benevolent Isis heard the woman's lamentation and taking the boy in her arms she spoke magical incantations, naming each of the scorpions and thereby dominating them and rendering their poison harmless.

Evidence of professional scorpion charmers comes from XIX Dynasty Thebes, but such professionals were no doubt commonplace, and they coupled their knowledge of the correct spells with experience in herbal medication. A document from the Ramesside village of Dier el-Medina reads: 'To be recited over a figure of Isis drawn on a strip of fine linen in which *nesut*-leaves have been put; rub (?) the upper part therewith. It is a true antidote to poison. They (these spells?) are in the hand of the scorpion-charmer everywhere' (McDowell 1999: 117). A Persian-period Demotic spell 'For Enchanting a Scorpion' recommends a do-it-yourself remedy incorporating magic words and spittle: 'You should recite (the spell) to your finger while it is moistened with spittle. Then you should seal the opening of the wound [i.e., the sting] with it (the spittle)' (Steiner 2001: 260). Conversely, the image of the harmful scorpion enters into Egyptian curse texts, such as the one located in the IV Dynasty tomb of Peteti at Giza:

With regard to any person who shall do anything evil to this (tomb) (or) enter therein (with evil intentions): The crocodile shall be against them in the water, the snake shall be against them on the land, the hippo shall be against them in the water, and the scorpion shall be against them on the land.

(Strudwick 2005: 437)

5. The scorpion as shield device

Attic red-figure pelike, London British Museum E385, c. 440 BCE, attr. the Achilles Painter. Photograph © The Trustees of the British Museum



COMMENT: Attic painters show us a wide variety of shield devices, including animals (snake, eagle, horse), inanimate objects (tripod, chariot) and patterns (rosettes, discs) (Chase 1902). Among animals the scorpion is not the most common choice of device – the lion, eagle and boar are the most frequent – but it is more common than most other animals. On this pelike an armed warrior offers a libation with Nike, the personification of Victory: his shield carries a large scorpion, with clearly defined tail segments and sting. The reason for the popularity of the scorpion on shields has to be the applicability of the scorpion's characteristics to the warrior: it hides and waits, then strikes to deadly effect; it never misses; and it is a small creature which is nevertheless a threat to much larger ones. A poem in the *Greek Anthology* (VII.578) plays on this last idea, commemorating Panopeus who hunted lions and panthers, and yet was killed by a tiny scorpion.

Some doubt existed among Greek painters as to the number of legs a scorpion should have: some illustrations show six legs plus pincers, while others (as here) have the correct eight legs plus pincers, the latter being modified pedipalps rather than legs. By far the largest number of images of the scorpion in Greek art is as a shield device: it appears on only a handful of other pots as background illustration, and is very rare on Greek coins. It is slightly more common on Roman coins – it is often found as a control mark on Republican coins, and later as an attribute of the personified Africa (*RIC* 299) – and was a popular decoration for gems, perhaps reflecting its astrological significance.

6. Remedies for scorpion stings

Pliny Natural History XIX.28–9; XXXII.19

The *stellio* [lizard] in turn is said to be particularly hostile to scorpions, so much so that even the sight of one grips the scorpion with fear and sends it into a cold torpor. For this reason people putrefy the *stellio* in oil and treat scorpion stings with it. Some boil this oil with litharge of silver into a kind of plaster and put it on the wound. The Greeks call this lizard the '*colotes*', and also '*ascalabotes*' and '*galeotes*'; they are not found in Italy. They are covered in spots, have a high-pitched cry and feed on spiders, all characteristics unlike the *stellio* in Italy.

Other remedies for a scorpion's sting are ashes mixed with chicken dung, the liver of a snake, a lizard or mouse cut in two, and the scorpion itself, either roasted and eaten or drunk in two *cyathi* of undiluted wine. It is characteristic of scorpions that they do not sting the palm of the hand, nor any hairy part. Pebbles of any kind, placed on a sting with the part which was lying against the earth against the wound, relieve the pain, and likewise a potsherd, covered with earth as it was found, placed on the wound – anyone who uses this method should not look behind him, nor allow the sun to touch him; also earthworms, powdered and placed on the sting. . .

River crabs pounded and drunk with water, or their ashes kept for the purpose, are a good remedy for all types of poison, and particularly for the sting of the scorpion, taken in asses' milk, or, if not available, goats' milk or similar. Wine should also be added. Pounded river crabs mixed with basil will kill scorpions; they have the same property against the bite of all poisonous animals, especially the *skytale*, snakes, the sea hare and the bramble-toad. The magi say that if ten crabs are tied together with a handful of basil, all the scorpions in the vicinity will be attracted to them, and they use the crabs with basil, or their ashes, as a treatment for scorpion stings. But sea crabs are less useful for all these purposes.

The flesh of river snails is also a remedy for the sting of a scorpion, raw or cooked. Some people for this reason preserve them in salt. They also apply them to the wound itself.

COMMENT: Pliny describes the scorpion in his book on insects (*NH* XI.86–91), but more telling is the frequency with which he mentions it in later books about medicine. Scorpion sting is one of the injuries for which remedies are most often given, and Pliny and other writers name over a hundred different remedies, including herbal (cypress, red seaweed), animal (tortoise gall, frogs) and mineral treatments (salt, agate). Remedies are also given by veterinary writers for scorpion stings to domestic animals (Beavis 1988: 30–2). As here, the range of suggested treatments also includes the magical, such as the earth-facing side of a stone applied to the wound, presumably representing the hiding-place of the scorpion itself. Few of these remedies have any basis in fact, but their large number tells us two things: that people were anxious to treat scorpion stings, and that if there was such a huge variety of treatments, all equally ineffective, scorpion poisoning was not in fact very serious. Pliny claims (XI.86) that stings were always fatal to girls and women, but rarely to men; he also says, though, that the venom takes three days to have effect, so a treatment once given could easily be supposed to have warded off the otherwise fatal consequences. The scorpion itself is occasionally suggested as a remedy for other diseases, including fevers and bladder stones (*NH* XXX.66, 100).

7. Cunning scorpions

Aelian On the Nature of Animals VI.20–3

Of scorpions the male is more dangerous, while the female seems to be less venomous. I understand that among scorpions there are eleven kinds: white ones and again red ones, and another kind which is dusky, and a black kind; there are other types, of which one is light green and another heavy-bodied, and one crab-like; the most poisonous kind is called flame-coloured. I have heard descriptions of winged scorpions and ones which have a double sting, and there is a type which has seven segments to its body. The scorpion does not lay eggs, but bears live young; some say that they do not breed by mating with each other, but. . . [*lacuna*] The heat of the sun causes them to breed prolifically.

Fire and the cock are particularly detested by lions, the hyaena is hateful to the leopard, and the *ascalabotes* (gecko) to the scorpion: a scorpion is overcome with torpor if it even encounters this last creature. . . .

Nature has, it seems, given scorpions a kind of intelligence, as can be seen from the following story. The Libyans, fearing the number of scorpions in their territory and their trickery, have invented many ways of protecting against them: wearing high boots, sleeping high up and keeping the bedsteads away from the walls, or placing the legs of their beds in containers filled with water, and they think that this will allow them to sleep in safety and peace. But the scorpions are cunning. If a scorpion finds a place in the roof from which it can hang, it takes hold with its pincers as strongly as it can, and lets its tail hang down. Then the next scorpion descends from the roof and creeps down the body of the first, taking hold of its tail in turn with its pincers and letting its tail dangle down into the air; and a third takes hold of it, and a fourth of the third, and then a fifth forming a chain, one climbing down the other. Finally the lowest scorpion stings the sleeper and climbs back up over the one above, and the next after it, then the third and all the rest, until they all let go of each other and unmake the chain.

COMMENT: Aelian begins with a standard account of scorpion breeds and habits based on Apollodorus of Alexandria's work *On Venomous Animals*, noting accurately that scorpions bear live young, although most of the rest of his account is based on popular ideas. His Libyan tale,

however, is rather different, attributing to the scorpion not only an insatiable desire to sting humans, but also intelligence and cunning. The insects' motivation is not to hunt and feed, but simply to cause injury, and the story plays on fear of scorpions attacking even the most wary sleeper. Such fear obviously ran deep: the emperor Marcus Aurelius wrote in a letter to his friend Fronto (*Ad M. Caes.* V.8) of his distress at finding a scorpion in his bed, and his relief that he did not lie down on it unaware.

Aelian's reading of scorpions as insatiable poisoners may have influenced his description (no doubt lifted from Ctesias' *Persica*) of a mass scorpion-hunt practised by Persians in preparation for the Great King's court migration. As he records (*NA* XV.26):

On the second stage of the journey from Susa in Persia to Media there are said to be innumerable scorpions, so that when the king of Persia is going to pass that way he issues orders, three days in advance, that everybody is to hunt them; he gives gifts to the man who has caught the highest number. If this were not done, the region would be impassable because beneath every stone and under every clod of earth there waits a scorpion.

Some species of scorpion do cluster in groups and some areas of the ancient world were known for having high scorpion populations: one route up the great escarpment of the Negev desert, for instance, was known as Scorpion Pass (Numbers 34:4; Joshua 15:3). Aelian's text neatly emphasises the general fear and loathing of the scorpion which was believed to be an omnipresent threat to human life.

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
G.H. Chase, 'Shield devices of the Greeks', *HSCP* 13 (1902), 61–127.
L. De Meyer (ed.), *Tell ed-Dēr III*, Vol. 4 (Leuven 1980).
H.K. El-Hennawy, 'Scorpions in ancient Egypt', *Euscorpius Occasional Publications in Scorpology* 119 (2011), 1–12.
B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 2005).
A. Green, 'A note on the "Scorpion-Man" and Pazuzu', *British Institute for the Study of Iraq* 47 (1985), 75–82.
O. Keel, *The Symbolism of the Biblical World. Ancient Near Eastern Iconography and the Book of Psalms* (New York 1978).
B.S. Lesko, *The Great Goddesses of Egypt* (Norman 1999).
A.G. McDowell, *Village Life in Ancient Egypt* (Oxford 1999).
J.B. Pritchard, *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton 1969).
J. Scurlock, 'Animals in ancient Mesopotamian religion', in B.J. Collins (ed.) *A History of the Animal World in the Ancient Near East* (Leiden 2002), 361–87.
R.S. Steiner, 'The Scorpion Spell from Wadi Hammamat: another Aramaic text in Demotic script', *JNES* 60.4 (2001), 259–68.
N.C. Strudwick, *Texts from the Pyramid Age* (Atlanta 2005).
M.N. Tod, 'The scorpion in Graeco-Roman Egypt', *JEA* 25.1 (1939), 55–61.
E.A. Wallis Budge, *Book of Legends of the Gods* (London 1912).

SCARAB BEETLE

Scarab beetles (*Scarabaeidae*) form a large family, found worldwide: most are scavengers. The dung-beetles, a subgroup of scarabs, play a vital role in ecosystems, burying and eating the dung of herbivores and omnivores. Several species of dung-beetle are native to north Africa, the Near

East and southern Europe, but one species received particular attention in antiquity, the so-called sacred scarab of Egypt (*Scarabaeus sacer*). The significance of this insect in Egyptian culture influenced their Mediterranean neighbours, and most discussion in Greek and Roman authors relates to the sacred scarab; the Greeks in particular were well aware of the significance of the scarab in Egyptian religion, and imported large numbers of scarab amulets. Much of what is said of the beetle (Greek *kantharos*, Latin *scarabeus*) thus derives from Egyptian texts, though Aristotle's account (later reproduced by Pliny, *NH* XI.98) seems to be more original: he describes both their reproduction, incubating their eggs over winter in a ball of dung, and their defensive technique of freezing motionless and contracting when touched (*HA* 552a 17–19; *PA* 682b 25–7).

In general there was little interest in the dung-beetle as animal: scarab-shaped gems were imitated by the Greeks, Phoenicians and Etruscans (Boardman 1968: 13–17), but the habits of the actual beetle were considered repellent, despite the vital niche it occupies in the ecosystem. It appears occasionally in the Aesopic fable tradition, most notably in the tale of its enmity with the eagle (Perry 3), where its role is that of the most lowly and despised creature which nevertheless manages to take revenge on its more powerful opponent.

1. Egyptian dung beetle

a) Khepri: line drawing of a detail from the tomb of Queen Nefertari, Thebes, XIX Dynasty



COMMENT: Various kinds of beetle were common in Egypt and enter into folklore and myth. Buprestids ('jewel beetles') are conspicuous for their metallic shine and pendants resembling them were made in pre-Dynastic eras and a number of objects decorated with their images were found in the tombs of Tutankhamun and Hetepheres. Click beetles (*Elateridae*) also inspired jewellery designs; they were associated with the protective goddess Neith. But it was the dung beetle in particular which stimulated the Egyptian sense of wonder.

The Egyptian belief in the supernatural powers of the dung beetle probably originated the use of its image to represent the hieroglyph *kheper*, which signified at the most basic level 'a beetle' and

in a more abstract reading, ‘transformation’. The sign also expressed the verbs ‘to be’, ‘to create’ and ‘to become.’ It is probable that *kheper* even meant ‘eternal life’, as a noun. Not surprisingly the scarab beetle became associated with rituals of the afterlife and mummies were often interred with dozens of scarab amulets tied to or tucked about their persons (Kritsky and Cherry 2000: 49–52). The god Khepri, taking his name from the insect, was thought of in scarab-beetle guise (Minas-Nerpel 2006); he was a form of the creator god Atum who pushed the disc of the sun through the heavens, imitating the natural habit of the scarab beetle which pushes a dung ball in front of it. The real-life practices of this diminutive creature clearly made a vivid impact on the Egyptians who were keen observers of all forms of wildlife.

2. The gigantic dung-beetles of Aetna

Aristophanes Peace 72–5

Slave: Then yesterday, the master went out and brought home – no idea from where – this huge Aetnean beetle, and made me act as groom for it, and he strokes it as though it were a colt. . .

Epicharmus fr. 76

The chief of the Pygmies stepped down from his chariot, drawn by two dung-beetles of the Aetnean kind.

Plato Comicus fr. 37

How great a mountain Etna is! As evidence, they say that the dung-beetles there are the size of a man.

COMMENT: The giant dung-beetle in Aristophanes’ comedy *Peace* on which the hero flies up to Olympus is said to be Aetnean, and the scholia on this passage preserve a set of fragments from other plays, comic and tragic, showing that the giant dung-beetles of Aetna in Sicily were proverbial: Epicharmus, the early fifth-century Sicilian comic playwright, includes in his mock-heroic battle between Herakles and the Pygmies a chariot drawn by dung-beetles, while the Athenian Plato jokes about their size. Some see the reference as being to actual large beetles that were local to Aetna on Sicily, exaggerated for comic effect (Davies and Kathirithamby 1986: 86–7), and cite as support a coin minted at Aetna in the 460s (fig. 19) which depicts beside a satyr’s head a recognisable dung-beetle, suggesting that it was a distinctive regional animal. Older discussions, however, see a pun on the breed of Aetnean horses: the chariot and winged steed of comedy are ‘Aetneans’, but of an unexpected type (Pearson 1914). Whatever the original meaning of the reference, by the time of Aristophanes the giant dung-beetles of Aetna were evidently firmly fixed in the popular mind, though entomologists suggest that the beetles were no larger at Aetna than anywhere else (Beavis 1988: 157–8).

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
J. Boardman, *Archaic Greek Gems: schools and artists in the sixth and early fifth centuries BC* (London 1968).
M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).

- G. Kritsky and R. Cherry, *Insect Mythology* (San José 2000).
M. Minas-Nerpel, *Der Gott Chepri. Untersuchungen zu Schriftzeugnissen und ikonographischen Quellen vom Alten Reich bis in griechisch-romische Zeit* (Leuven 2006).
A.C. Pearson, 'Aitnaioi kantharoi', *Classical Review* 28 (1914), 223–4.
J. Ward, *The Sacred Beetle* (London 1902).

SPIDER

Spiders were as common in ancient houses as they are in our own, and their webs created as much housework: Ulpian lists among the paraphernalia belonging to a typical Roman household 'long rods for removing spiders' webs' (*Dig.* 33.7.12.22). Spiders were not, however, viewed with the same dislike as today: no ancient text mentions a phobia of spiders in general. Egyptian and Near Eastern texts generally use spiders only in folk tales and mythological stories, but Classical authors took a more scientific approach to the insect. Three kinds of spiders were distinguished (*Ar. HA* 622b 27–623a 8): poisonous *phalangia*, wolf-spiders (*lukoi*) which hunted without webs and web-weaving orb spiders (*arachnai*); the latter, recognised as harmless, were admired for their industry and skill in spinning webs. They lived alongside humans in domestic and public buildings, and in some cases webs spun in temples were interpreted as omens: before the destruction of Thebes in 335, several sources tell of an unusually large and impressive spider's web that was found on the statue of the goddess in the temple of Demeter (*Diod.* XVII.10.2–5; *Ael. VH* XII.57).

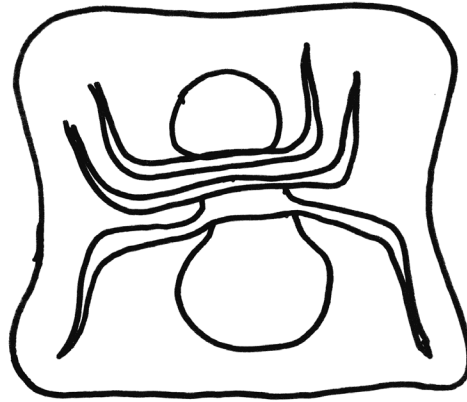
Because they were commonly at hand, cobwebs had a specific use in folk medicine, as a form of first aid for bleeding wounds: in Petronius' *Satyricon* (98) a cut on the forehead is dressed with spiderweb in oil, and Pliny recommends it for razor cuts (*XXIX.114*). Like other small insects, spiders are rare in classical art, though a few Greek gems do depict them, principally in relation to the myth of Arachne (below no.2).

1. Spider stories

a) Old Babylonian Wisdom texts (after Lambert 1960: 220)

The wood-wasp went along the street to a lawsuit
The . . . summoned the . . . sand-wasp to witness.
The spiders threw the sand-wasp in fetters,
And on the edge of the field in the entrance to the mouse's hole he was cut to pieces.
The Spider spun a web for a fly.
A lizard was caught
On the web, to the spider's disadvantage

**b) Cylinder seal, Mesopotamia, Late Uruk period
(New York, The Morgan Library seal no. 29)**



COMMENT: Spiders have an important role in the myths and folk lore of the ancient Near East. In Sumerian mythology the spider goddess, Uttu, was considered to reside in the sky (she was associated with the constellation of Canis Major) while Enki, her husband, generated organic life on the earth below. A bilingual Sumerian and Akkadian incantation rite for the release of pain and troubles invokes Uttu as the great cosmic spinner who spins the vast multi-coloured web of life, and her undeniable prowess in spinning and weaving afforded her the honourable titles of Skilful Woman and Faithful Woman. In fact, Uttu's identification as a divine weaver is closely allied to her role as a paradigm of wife as she shared with human wives their creative function of weaving. Not surprisingly the goddess was envisaged as a spider, as seen in the cylinder seal above.

The image of the spider's web was important. It was seen as a snare, a trap and a lair and was therefore employed as a metaphor for death and destruction and even of decay. Animal fables from Babylonia employ the web image to great effect, although not always to the spider's advantage. Yet the web was also seen as fragile and ephemeral. The Hebrew bible uses the image of the web to evoke the concept of hopelessness:

Such is the destiny of all who forget God;
so perishes the hope of the godless.
What they trust in is fragile;
what they rely on is a spider's web.
They lean on the web, but it gives way;
they cling to it, but it does not hold.
(Job 8.13–15)

2. How the spider spins its web

Aristotle Historia Animalium 623a 2–b3

Of these *phalangia* the smaller kind does not spin a web at all, and the larger kind only a thick and coarse web on the ground or on dry stone walls. It makes the web across a hole, in which it lurks at the end of the threads, until a victim is caught in the web and

causes it to vibrate; then it emerges. The spotted *phalangion* weaves a small and coarse web under trees.

There is in addition a third kind of spider, the most intelligent and the most skilful type. To make a web it first places guide threads around the border on each side, then lays out the warp threads radiating from the centre (which it establishes with great accuracy), then over these it spins the weft threads, so to speak, and binds them with intermediate strands. It makes its lair and larder for its prey elsewhere, to one side, but it waits for its prey at the centre of the web. And whenever an insect flies into the web the centre vibrates, and the spider binds it up and wraps it in silk until it is unable to move, then picks it up and carries it away; if it is hungry at the time, it sucks out the juices (which makes a fine meal for it); if it is not hungry it repairs any broken threads and returns to the hunt. If in the meantime another insect becomes caught, the spider first goes to the centre of the web, and from there goes out to the new prey as before. If the web is damaged in any way, the spider spins it over again, either at sunset or at dawn, because their insect prey are particularly active at these times. The female spider is the one which spins and hunts, while the male shares in the catch.

The skilful spiders which spin complex webs are of two kinds, one large and one small. The former is long-legged and hangs at the bottom of the web to wait for its prey, so as not to scare off the insects which fly into the web above, since because of its size it cannot easily hide. The other kind is smaller in size and sits at the top of the web, hiding in a small hole.

Spiders are able to spin a web as soon as they are born; the silk is not produced from within their body as an excretion, as Democritus claims, but is sloughed off their outer surface, like the hairs which some creatures such as the porcupine cast off. Spiders will take on and capture in their threads even quite large prey; they will even tackle small lizards, darting around their body to wrap them with silk until they manage to immobilise the lizard's mouth; then they approach to sting it.

COMMENT: The spider's web provided one of the classic examples of animal intelligence in antiquity: in their strength, delicacy and complexity spider webs were said to far outclass anything that a human could produce (Ael. *NA* I.21; Plut. *Mor.* 966e–f), and Philon says that a web is a work of art (*Alex.* 17–18). The spider was given a mythology of its own (the myth of Arachne) to express the relationship between women's craft in weaving and the spider's skill (Ov. *Met.* VI.5–145).

Aristotle's account of web construction, based on accurate observation, as ever underlies most later descriptions, and shows a sound knowledge of the spider's hunting practices; Plutarch, on the other hand, misinterprets the web as a kind of hunting net to envelop the prey rather than a sticky trap. The small scale of invertebrate life nevertheless led to some confusion, as over the production of spider silk: the passage shows that there were two schools of thought, and Aristotle himself follows the incorrect view; likewise the reproduction of spiders was not fully understood (*HA* 555a 27–b 17; Beavis 1988: 54–5). The actions of the spider in hunting, however, could be observed in the writers' own houses: Pliny refers to 'the ash-coloured spider which spreads its webs over our walls to catch flies' (XXIX.87). Although flies are the spider's natural prey, they were often credited with tackling larger animals, as here – *AP* IX.233 is an epigram on a cicada caught by a spider, while Pliny refers not only to 'young frogs and lizards' (XI.84), but even includes a fantastical account of a spider attacking and subduing a snake by letting itself down on a thread to bite the snake's head (X.206). Even in such unlikely tales, the admiration for the spider's abilities shines through.

3. The many kinds of poisonous spider

Nicander, Theriaca (On Poisonous Animals) 715–58

Learn now the kinds of deadly spiders and the marks of their bite: first there is the sooty *rhox* (grape-spider), black as pitch, creeping with feet moving in succession; it carries its hard and deadly teeth in the middle of its belly. A man bitten by the *rhox* appears to have no wound on his skin, but his eyes above are suffused with blood, and shivering overcomes his limbs; immediately his skin and genitals swell and his penis projects with a foul discharge. Weakness creeps up his hips, and his knees give way.

Now tell of the *asterion* (starry spider), different to the *rhox*: on its back bright stripes gleam on its skin. At its bite a shivering creeps gradually over the victim, confusion in his head and weakness in his knees.

Another is the *kyaneon* (blue spider), which is hairy and darts about above the ground; the man it bites carries a terrible wound on his skin, his heart becomes heavy within him, darkness clouds his temples and he is seized by foul vomiting which has the appearance of a spider's web. Death stands close at hand.

Another is the *agrōstes* (hunter), which is similar to the wolf-spider, hunter of carrion flies; it preys on bees, fig-wasps, horseflies and any other creature which blunders into its snare. But to man its bite is painless and trivial.

Another is an aggressive creature, the so-called *sphekeion* (wasp-spider), reddish in colour and like the fierce wasp which takes the imprint of the horse's fiery spirit. For wasps are born from horses as bees are from bulls, [generated by their putrefying carcasses]. The wasp-spider's bite brings severe swelling and many forms of illness, shaking or weakness in the knees; the victim wastes away and falls into a deadly sleep which brings the final relief.

Next we have the *myrmekeion* (ant-spider), which is similar to the ant: its neck is reddish, its body dust-coloured, and its broad back is speckled all over with starry dots. Its sooty head rises little above its neck, yet its bite is as painful as that of the spiders mentioned above.

When men go harvesting by hand, without sickles, plucking beans and lentils while the fields are still green, there in swarms dart little spiders of fiery colour, like blister-beetles. Small though they are, their painful bite raises blisters, the wits wander and the victim becomes mad, the tongue babbles disordered words and the eyes roll.

COMMENT: Nicander's list owes more to the power of the imagination than to entomological accuracy, since there is in southern Europe only one kind of poisonous spider: *Lathrodectus tredecimguttatus*, the black widow, the bite of which is painful but not usually fatal. Most people, however, were convinced that spiders could and did kill, and a lively tradition of writing about poisonous spiders existed, beginning with the third-century BCE Apollodorus of Alexandria, whose lost work *On Poisonous Animals* was copied by Nicander, Pliny and other writers, though not all agree with each other in all details. Some of the *phalangia* listed above are clearly colour variants of the same species, but others are hard to identify, since they reflect popular fears. Some of the creatures listed here are not even spiders: Beavis (1988: 47–9) suggests that the *sphekeion* and *myrmekeion* may be forms of insect, and the final element of the list, omitted here, is a moth. The list of luridly described symptoms is similar to literary treatments of poisonous snakes (see SNAKE no. 10), but other sources suggest more limited effects: *AP* IX.233 is an epigram on a woodcutter who lost a foot to gangrene after being bitten by a spider.

One can understand the concern to identify and catalogue poisonous species when remedies against a bite were largely useless: Nicander himself lists thirty-four different plants as possible cures, as well as poulticing and bleeding (837–933), and Pliny recommends folk remedies including the brains of a cock with pepper drunk in vinegar and water, and ash of sheep's dung applied in vinegar (*HN* XXIX.88). All sources agree that one cure for a spider bite was the spider itself, and Aristotle indicates that apothecaries kept poisonous spiders in jars for this purpose (see *SNAKE* no. 7).

Bibliography

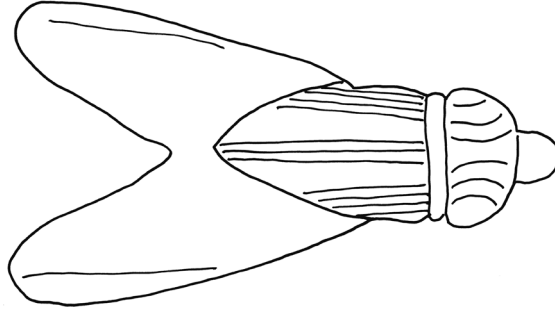
- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
J. Bouffartigue, 'Les animaux technicians: réflexions sur l'*animal faber* vu par les Anciens', *Rursus* 1 (2006) (online at <http://rursus.revues.org/48>).
A.S.F. Gow and A.F. Scholfield, *Nicander: the poems and poetical fragments* (Cambridge 1953).
K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960).

FLY

Human habitation offered unparalleled opportunities to the fly: the development of towns and cities with concentrations of humans and their refuse, herd animals and their related industries, religious sacrifices and battles, all allowed flies to exploit humans to great effect. Flies were ever-present in ancient life, proverbial both for their numbers and their persistence, and humans had few effective defences against them. The Akkadian language knows of nine types of *zumbu*, 'fly', in addition to the horse fly (*lamsatu*), the mosquito (*zaqqitu*), the nit (*nebu*), and two types of gnat (*ašturru*); another Akkadian word, *baqqu*, simply means 'small fly' and might be used for any minuscule buzzing insect. In spite of the variety of names, few writers took particular notice of insects – Pliny does not even consider the housefly in his *Natural History* – and the understanding of different species was limited: biting and stinging flies were differentiated from harmless ones, and mosquitoes were also considered separately, but the categories were rarely clear-cut, even among specialists (Beavis 1988: 219–20). Considerable confusion also existed over flies' reproduction, most believing that they were generated spontaneously in water, mud, wood or flesh. But while no ancient authors can be said to be very interested in flies, the frequency with which they figure in comparisons and proverbs is testimony to their ubiquity in ancient life. The Hebrew prophet Isaiah (51.6) uses the image of dead flies to emphasise Yahweh's power over life and death; Xenophon (*Mem.* III.11.5) refers to fortune-hunters who settle on a friend like flies; Plutarch (*Mor.* 750c) cites the proverbial enthusiasm of flies for milk; and Pausanias (XIX.28.7) compares the colour of a painting to that of 'the flies which settle on meat'. The Greek version of the phrase 'to make a mountain out of a molehill' was 'to make an elephant out of a fly' (Lucian *In Praise of the Fly* 12), which has its origins in a Babylonian comic proverb. *In Praise of the Fly* was written by Lucian in the second century CE as a literary *tour de force* in which he demonstrates that it is possible to create an extended paean to one of the least worthy of creatures, combining learned mythological and literary references with praise of the fly's gauzy rainbow wings, wisdom and courage.

1. Soul or soldier? The flies of Egypt

Fly amulet carved from hippopotamus ivory, New Kingdom, XVIII Dynasty, c 1550–1295 BCE (New York, Metropolitan Museum 26.7.1285)



COMMENT: This well-observed and carefully crafted fly pendant is one of many discovered in a funerary context, suggesting that the Egyptians saw a connection between the fly and the soul. Kritisky (1985) explains this by suggesting that the Egyptians might have been disturbed by seeing flies emerging from human cadavers that were being prepared for mummification (a process long enough for flies to lay eggs and breed within the corpse). The belief gradually emerged that flies might be the *ka* of the deceased leaving the body before it had been fully prepared. The fly amulets were subsequently inserted into the mummy wrappings and helped restore the soul to the body.

Aside from its occurrence as a funerary talisman, the motif of the fly had an even more extraordinary use, namely, in military decorations. The evidence for this comes from the autobiographical inscriptions of two warriors of the early XVIII Dynasty. One of them, Ahmosepennekhet, relates that 'King Thutmose (I) gave to me of gold: two bracelets, four necklaces, six flies, three lions, two axes' and Amenemheb, who lived under Thutmose III and Amenhotep II, has left two such records, one reading: 'He gave to me gold because of bravery, before the whole people. List thereof: of the finest gold: a lion, four necklaces, two flies, four arm rings', and the other: 'Then my lord gave to me the gold of honour. List thereof: two golden necklaces, four arm rings, two flies, a lion' (Breasted 1906 (II): §23, 585, 587). Some large and heavy gold flies (now in the Cairo Museum) dating to the XVII Dynasty were clearly military decorations of the kind mentioned in the inscriptions. In this context the fly was used by the Egyptians as a symbol of persistence and they seem to have admired its powers of annoyance, being suggestive of a soldier's success in harassing the enemy (compare no. 5 below). Wilkinson (1971: 99) argues that these so-called Golden 'Flies of Valour', once awarded only for military achievement, could have been bestowed on any courtier worthy of royal favour. Fly pendants were found, for instance, in the burial chamber of Senenmut, the royal Stewart of Hatshepsut and even royal women owned golden flies: the three foreign-born wives of Thutmose III, the XIX dynasty Queen Tawosret and, most renowned, Queen Ahhotep (the original owner of the Cairo Museum jewellery) were all buried with golden fly pendants.

2. A plague of flies

Hebrew bible, Exodus 8:20–32

Then the Lord said to Moses, ‘Get up early in the morning and confront Pharaoh as he goes to the river and say to him, “This is what the Lord says: Let my people go, so that they may worship me. If you do not let my people go, I will send swarms of flies on you and your officials, on your people and into your houses. The houses of the Egyptians will be full of flies; even the ground will be covered with them. But on that day I will deal differently with the land of Goshen, where my people live; no swarms of flies will be there, so that you will know that I, the Lord, am in this land. I will make a distinction between my people and your people. This sign will occur tomorrow.”’

And the Lord did this. Dense swarms of flies poured into Pharaoh’s palace and into the houses of his officials; throughout Egypt the land was ruined by the flies. Pharaoh said, ‘I will let you go to offer sacrifices to the Lord your God in the wilderness. . . .’ Then . . . the flies left Pharaoh and his officials and his people; not a fly remained.

COMMENT: The Hebrew phrase translated here as ‘swarms of flies’ can also be translated as a ‘mixture of noisome beasts’, probably suggesting the myriad of species recognised by the ancient Hebrews (although they, like other peoples of antiquity, paid little attention to the differences). When the Psalmist recollects the story of the fourth plague of Egypt, he recalls that, ‘(Yahweh) sent diverse swarms of flies, which devoured them, and frogs, which destroyed them’ (Psalm 78.45), suggesting that the Egyptian plague was the result of numerous types of fly swarming together (interestingly, the Afrikaans Bible speaks more specifically of ‘a plague of stinging, biting flies’). Of course flies represent filth, disease and contamination; they spread and carry diseases like typhoid fever, cholera, diarrhoea, worms and even the polio and tuberculosis viruses, and while the peoples of antiquity had little knowledge of the direct danger of flies to human health, they realised that these insects were more than just a nuisance, and that they were, somehow, carriers of sickness. In antiquity, the fly was, above all else, a symbol of filthiness.

In the Hebrew Bible, the second, third and fourth plagues of Egypt – frogs, lice and flies – form a triad. The frogs are associated with water, the lice with earth and the flies with air (see FROG). The flies of the fourth plague correspond to the flying creatures created by Yahweh in Genesis (1:22): ‘flying creatures multiply in the land’. But in Egypt, the flies not only multiplied in the land, they filled it, so that the plague became a reversal of the one anticipated by the blessing of Yahweh to mankind in Genesis 1:28, where man is instructed to ‘Rule the fish of the sea, the winged creatures of the heavens, and all living creatures which creep on the earth.’ In Egypt, the plague of flies stands as a symbol of man’s inability to control nature, if Yahweh so wills it.

3. The proverbial fly

a) Sumerian proverbs (Alster 1997 (1): 100)

Flies enter an open mouth. . .

A magician threatened someone: ‘I’ll enter your body as a fly and see your body from the inside.’

b) Babylonian Wisdom text (Lambert 1960: 217–19)

A fly, as it settled on an elephant,
said, 'Brother, did I press your side? I will make [off] at the watering place.'
The elephant replied to the fly,
'I do not care whether you get on – what is it to have you? –
nor do I care whether you get off.'

COMMENT: Though assuredly a pest and nuisance in the ancient Near East, flies provide only rather bland and uninformative proverbs (as here) and similes in Mesopotamian literature. For example, the two sexless creatures fashioned by Enki, the god of wisdom, and sent down to the Underworld to flatter its queen, Ereskigal, and thus gain access to the 'water of life', are said to 'buzz about the door (of Ereskigal's palace) like flies' and in the Akkadian Flood Story the gods, attracted by the smell of burnt offerings, resemble flies: '[The gods sniffed] the savour, they were gathered like flies around the offering' (Foster 1996: 183) while the gods of Uruk of the Sheepfold 'become like flies buzzing in the square'. In the Akkadian Flood Story, the drowned human race is compared to dragonflies on the water's surface (Foster 1996: 182). Flies are seldom represented in literature or art of the Levant either, with a few exceptions, such as on Middle Bronze Age jewellery from Ajjul (near modern Ramallah). Hebrew literature, however, frequently uses insects to provide effective images, as when Job's companion says of the godless man, 'His trust is a spider's web' (Job 8:14). The troops of the enemy are described as insect pests: Assyria is the hornet and Egypt the fly who will come and settle on the land (Isaiah 7.18–19); the fly-image here is simultaneously demeaning and frightening. A silver plaque from northwest Iran (c. 1000 BCE) shows vultures pecking at the corpse of a bird, and they are joined by a giant fly (Kawami and Olbrantz 2013: 140). Yet the fly, because of its miniature size, also has comic potential as illustrated in the proverb of the fly and the elephant – a classic of Babylonian humour (see Haubold 2013: 37, who argues for a wren in the place of a fly).

4. The Lord of the Flies

Hebrew bible, 2 Kings 1:1–4, 17

After Ahab's death, Moab rebelled against Israel. Now Ahaziah had fallen through the lattice of his upper room in Samaria and injured himself. So he sent messengers, saying to them, 'Go and consult Baal-Zebub, the god of Ekron, to see if I will recover from this injury.'

But the angel of the Lord said to Elijah the Tishbite, 'Go up and meet the messengers of the king of Samaria and ask them, "Is it because there is no God in Israel that you are going off to consult Baal-Zebub, the god of Ekron?" Therefore this is what the Lord says: "You will not leave the bed you are lying on. You will certainly die!"' So Elijah went . . . [Ahaziah] died, according to the word of the Lord that Elijah had spoken.

COMMENT: The name of the demon Beelzebub, originally the Phoenician deity Ba'al-zebûb, literally means 'Baal of the Flies' or 'Lord of the Flies'. In the Hebrew Bible, Beelzebub tempted King Ahaziah of Israel away from Yahweh and in later Christian tradition, deriving from the New Testament Gospels, he was called the 'prince of devils' (Matthew 12:24; Mark 3:22; Luke 12:15). In the Middle Ages, demons were frequently depicted as flies, and so people often thought of swallows and other insectivorous birds as holy. There are several stories of devils taking the form of insects to enter the bodies of people by mouth (Connor 2006: 40–4).

The text of 2 Kings recounts how Ahaziah attempted to consult Beelzebub during his last illness; it is the only oracle of the god known to us as no other mention of him occurs in the Hebrew Bible. The name ‘Lord of the Flies’ was applied to the deity either because as a sun god he brought the flies, or more likely (given that Ba’al was not really a solar deity) because he was invoked to drive away the flies from the sacrifice, like the Greek god Zeus Apomuios, who drove them from Olympia, or the hero Myiagros in Arcadia (no. 6 below). It is possible that Ba’al-zebûb is a corruption of Ba’al-zebul, ‘the lord of the house’ or high house (temple). Hebrew contempt for the Ba’al cult compelled them to change the god’s name to Ba’al-zebûb, the lord of flies in much the same way that the Phoenician theophoric name Yta-ba’al was later rendered by Hebrew scribal spin doctors as Jezebel (Ye-zebul), meaning ‘woman of dung’ (Fensham 1967).

5. The warlike spirit of the fly

Homer Iliad XVII.567–74

So he spoke, and the owl-eyed goddess Athena rejoiced,
Because he prayed to her first of all the gods.
She breathed strength into his arms and legs
And placed in his heart the daring of the fly,
Which, no matter how often it is driven off from human skin,
Has an insatiable desire to bite, for human blood is sweet to it;
She filled his dark heart with this insatiable spirit,
And Menelaus stood over Patroklos, and cast his shining spear.

Plutarch Sayings of Spartans (Mor. 234c–d)

A Spartan man had on his shield a fly as device, no bigger than lifesize, and when certain people were mocking him, saying that he did this so as to escape notice on the battlefield, he replied, ‘On the contrary, it is to make myself noticeable: I approach so close to my enemies that they see the fly at its real size.’

COMMENT: The fly is not a creature that one would normally associate with military valour, but these sources indicate that the Greeks saw the qualities of the fly differently. The first makes the fly’s persistence and reckless courage an admirable example, and the life-sized fly as shield device seems to reflect the same idea, of the warrior who will never give up no matter how large the foe (cf. SCORPION no. 5). A similar attitude seems to underlie other fly similes in Homer: the Achaean soldiers swarm like flies across the Trojan plain (*Il.* II.469–71), and Athena brushes aside an arrow from Menelaus ‘as a mother brushes away a fly from her sleeping child’ (*Il.* IV.131–2). One might wonder whether the metaphorical connection between army and fly was an immediate one: the ancient army, often with both pack animals and wounded men, would have been a great attraction to flies, and we hear in Theophrastus’ *Characters* (25.5) of the practical concerns about keeping flies from the wounds of injured soldiers, something which also preys on Achilles’ mind in the *Iliad* (XIX.23–6, 30–1)

6. Flies and sacrifice

Pausanias Description of Greece V.14.1

There is a story that Herakles the son of Alcmene was sacrificing at Olympia, and was bothered by a swarm of flies: either by his own discovery or on someone else's advice he made an offering to Zeus Apomuios (Averter of Flies), and by doing so drove the flies away to the other side of the river Alpheius. And they say that as a result of this the Eleians too make sacrifice to Zeus Apomuios, in order to drive the flies out of Olympia.

COMMENT: It is hardly surprising that flies should be mentioned as a problem at a religious site: the practice of animal sacrifice in ancient cities meant a constant attraction to flies at temples and other public places. Concerns about flies at Olympia especially are easy to understand: large numbers of spectators gathered at the Games, living in tents or in the open, and this, combined with extensive sacrifices, would have attracted clouds of insects of all kinds. Many deities are credited with the ability to drive away flies: Zeus in his incarnation as Apomuios or Muiagros, Apollo in Acarnania, and Muiagros as an independent deity, and at Rome Herakles himself (Davies and Kathirithamby 1986: 151–2). Pliny (*NH* X.79) says that neither flies nor dogs enter the temple of Heracles in the Forum Boarium, and as the latter was Rome's cattle market, scaring flies away from here would be a notable feat; McDonough (1999: 473–7) argues that Herakles' role in the Forum Boarium was in fact as a protector of cattle, averting harmful insects from them. Aelian (*NA* V.17) takes the story of Olympia further, claiming that the flies voluntarily left Olympia during the period of the Games, and comparing them favourably to women, whose presence had to be legislated against. Just as with locusts (*q.v.*) and other harmful insects, the appeal to the gods to disperse flies demonstrates how few other deterrents existed in antiquity.

7. The gadfly

Virgil Georgics 146–56

Around the groves of Silarus and green Alburnus with its oaks
Swarm flying insects, in Latin named *asilus*
And called *oistros* by the Greeks;
Stinging, shrill-buzzing, they drive the whole herd
Panicked through the woods, the air ringing with their bellows,
The groves and dry banks of Tanager echoing to their hooves.
With this insect Juno once wreaked her anger,
Devising a torment for Inachus' daughter in shape of a cow.
From this creature too, most fierce in midday heat,
Protect your pregnant heifers, and pasture your herd
At sunrise, or when night first shows its stars.

COMMENT: While the ancients made little distinction between species of fly, they did make a clear identification of one type, the gadfly or horsefly (*muops*, *oistros*), a large biting fly which attacks cattle and other animals (Beavis 1988: 225–7). This creature was seen as particularly destructive for its ability to irritate animals into stampede, and it found its way into mythology as both the insect sent by Hera to torment Io in her form as a cow, and that sent by Zeus to distract

Pegasus when the hero Bellerophon tried to fly up to Olympus (Davies and Kathirithamby 1986: 164). Our sources give frequent testimony to the problem of flies and herd animals: Homer refers twice to flies occupying sheepsteads (*Il.* II.469–71, XVI.641–2), and Xenophon to stabled horses worried by flies (*Equ.* 4.5). The veterinary writers give particular attention to the problem of animals' wounds becoming infested by flies or maggots; see DOG no. 20 and Columella *De Agricultura* VI.16.2–3.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
 I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
 J.H. Breasted, *Ancient Records of Egypt* (5 vols) (Chicago 1906).
 S. Connor, *Fly* (London 2006).
 M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
 F.C. Fensham, 'A possible explanation of the name Ball-Zebub of Ekron', *Zeitschrift für die alttestamentliche Wissenschaft* 79:3 (1967), 361–4.
 B. Foster, *Before The Muses: an anthology of Akkadian literature* (Bethesda 1996).
 J. Haubold, *Greece and Mesopotamia. Dialogues in Literature* (Cambridge 2013).
 T.S. Kawami and J. Olbrantz, *Breadth of Heaven, Breadth of Earth. Near Eastern Art from American Collections* (Seattle 2013).
 G. Kritsky, 'Tombs, mummies, and flies', *Bulletin of the Entomological Association of America* 31 (1985), 18–19.
 W.G. Lambert, *Babylonian Wisdom Literature* (Oxford 1960).
 C. McDonough, 'Forbidden to enter the Ara Maxima: dogs and flies, or dogflies?', *Mnemosyne* 52 (1999), 464–77.
 A. Wilkinson, *Ancient Egyptian Jewellery* (London 1971).

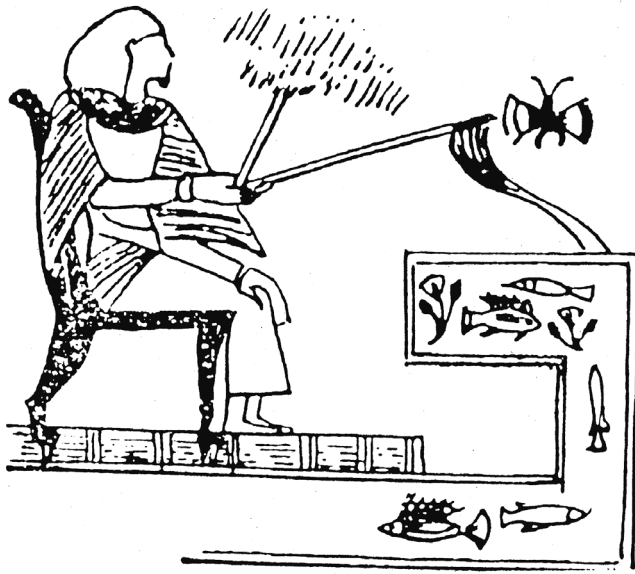
BUTTERFLY/MOTH

Attitudes towards the butterfly in antiquity are perhaps the most unexpected of all: although numerous attractive butterfly species inhabited the ancient Near East and the Mediterranean, neither the Egyptians, their Mesopotamian neighbours, the Greeks nor Romans betray any interest in them. They are very rarely referred to in literature, with no mention of their colours or variety. They sometimes appear depicted in tomb art in Egypt, but in the Classical world, after the Mycenaean period, we find few depictions of butterflies in art. Several explanations have been proposed for this: Beavis (1988: 121) wonders whether butterflies might not have been considered as small birds, while Davies and Kathirithamby (1986: 100–1) suggest that a perceived link between the butterfly/moth and the soul (the Greek for butterfly is *psuche*, soul: see below no. 2) meant that they were in some way taboo. The Akkadian language identifies three types of butterfly under the name *kursiptu* and three more under *kurmittu* (an alternative word is *turzu*) and Assyrian texts nod towards recognising the butterfly's life cycle ('a butterfly does not fit into or return to its own cocoon' – Oath of Esarhaddon 79), yet the only extensive discussion of butterflies or moths is to be found among classical writers on agriculture who describe insect pests of gardens or beehives, and in most cases they concentrate on caterpillars, unaware that caterpillar and butterfly are in fact the same animal. Aristotle does give an accurate account of the life cycle of the cabbage white butterfly, *Pieris brassicae* (*HA* 551a 13–27), which Pliny reproduces (*NH* 11.112), but this kind of knowledge did not penetrate beyond ancient zoologists, and even the scientific writers believed that both caterpillars and butterflies were spontaneously generated on the plants on which they fed. The complete lack of interest in butterflies (moths get slightly more attention, because of their proclivity for destroying valuables like textiles) seems inexplicable given

the affection in which other insects such as the cicada and bee were held, but it is clearly a very deep-seated cultural difference.

1. Nebunenef's butterfly

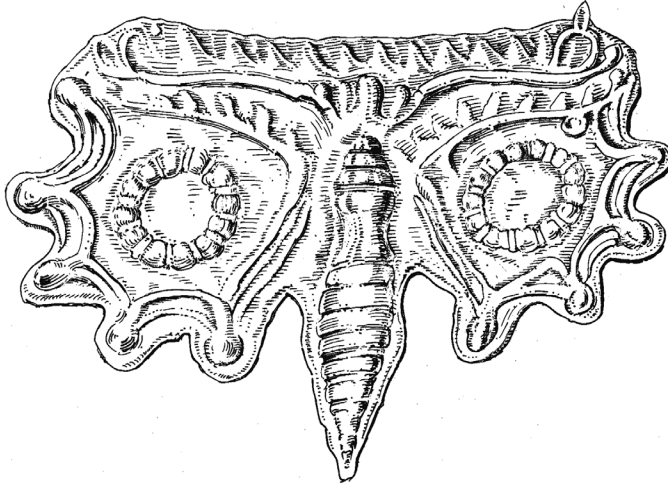
Egyptian wall painting, tomb of Nebunenef (TT 157) from Thebes, New Kingdom, XIX Dynasty (after Germond 2008–10: 54)



COMMENT: The tomb-painting of the nobleman Nebunenef, who is shown here as an elegantly dressed fisherman taking his ease beside the pool in his garden, is enlivened by a highly stylised butterfly fluttering over the water. Animal representations in Egyptian art are usually depicted with such precision that they can be easily identified by modern naturalists, but butterflies are an exception to the rule, and in most cases a determination of the species is almost impossible because the representations tend to be generic depictions of the insect, often combining characters common to all butterflies (and moths). Butterfly-designs were used as inlays in Old Kingdom jewellery (McFarlane and Mourad 2012: pl. 118), their open wings making effective decorative patterns, but these are clearly highly stylised representations. It is likely that some butterflies appearing on the backs of faience hippos of the Middle and New Kingdoms are Azure butterflies (*Polyommatus icarus*/*Lycæna icarus*), commonly found in wetlands (see HIPPOPOTAMUS no. 1). Tomb art of the New Kingdom, however, presents more favourable evidence since well-preserved pigmentation makes identification possible (Houlihan 1996: 194): the tombs of Nakht and Nebamun clearly depict Tiger or African Queen (or Monarch) butterflies (*Danaüs chrysipus*) (Parkinson 2008: 128). They are shown numerous times flying around in a thicket amongst birds and pintail ducks. It is possible that the tomb images of butterflies allude to a role they may have played in visions of the afterlife as symbols of regeneration, but there is no suggestion that butterflies were thought of by the Egyptians as symbols of the human soul.

2. Mycenaean butterflies

Gold clothing ornament from Mycenae, c. 1500 BCE
(drawing by Tessa Rickards)



COMMENT: This open-winged butterfly is one of a large number of gold decorations for clothing found in the Shaft-Graves at Mycenae; they include many animal and plant designs, including the octopus and the dragonfly. The bestiary of the Myceneans was markedly different from that of the classical Greeks: wall-painting, jewellery and vase decoration used organic and naturalistic designs of flowers and animals, including flying birds and marine life (Betancourt 2007; see DOLPHIN and OCTOPUS). Only in Minoan and Mycenaean art do we find an appreciation for the patterns of butterfly wings – here and on gems (Davies and Kathirithamby 1986: fig. 21) ‘eye’ markings are represented. Dietrich (1974: 121–2) suggests that butterfly and chrysalis imagery had a religious and symbolic meaning of the re-emergence of life from death, but this is impossible to verify.

The only other form of classical art in which butterflies are common are the ‘garden paintings’ in imperial Roman houses: many include butterflies among flowers and plants, although not of identifiable species – almost all are pale-winged and depicted in flight (Larew 2001: 319–22).

3. The soul as butterfly

CIL VI.26011 (= Courtney *Musa Lapidaria* 182)

Scita is buried here.

A fluttering butterfly has been caught in a spider’s web: a swift prey for the spider, a sudden death for the butterfly.

COMMENT: Just as the butterfly was called *psuche* in Greek, it was sometimes known as *anima* in Latin, and several Roman epitaphs explicitly depict the soul of the deceased as a butterfly. In this example Scita’s soul has been trapped by the spider of death, but on another epitaph inscription from Spain (CIL II.2146) the speaker asks that his heirs sprinkle his ashes with wine,

so that his *papilio* (butterfly soul) can flutter about drunk after his death. The link with the soul seems to stem from the living butterfly's emergence from an apparently dead chrysalis; Davies and Kathirithamby (1986: 103–7) trace this idea through Greek and Roman history, illustrating a Roman sarcophagus on which Athena contributes a butterfly-shaped soul to the creation of mankind, and it found its fullest application in Christian writers, who made the butterfly an allegory of the resurrection (e.g. Basil *Hex.* VIII.8).

4. Destructive moths

a) *Hebrew bible, Psalms 39.11*

Remove your scourge from me;
I am overcome by the blow of your hand.
When you rebuke and discipline anyone for their sin,
you consume their wealth like a moth—
surely everyone is but a breath.

b) *Hebrew bible, Job 4.19, 13.28*

If God places no trust in his servants,
if he charges his angels with error,
how much more those who live in houses of clay,
whose foundations are in the dust,
who are crushed before a moth!
So man wastes away like something rotten,
like a fine garment eaten by moths.

COMMENT: The Psalmist and the author of Job use the Hebrew word *'ash* to refer to the species of moth of the *Microlepidoptera* group known more colloquially as the 'wool moth' (Akkadian identifies seven types of moth, compounds of the words *ašašu* and *sasu*, and another three sorts derived from the word *miqqanu* or *meiqanu*). Clearly the biblical authors have in mind the moths that gnaw, feed on and ultimately destroy organic materials. Job's image of the moth destroying a house is a real one: the moth was capable of digesting the straw used in mud-brick houses, resulting in their collapse. Likewise, clothing eaten by moths is a waste of household wealth and industry since textiles of all sorts, but especially dyed and embroidered ones, were ranked as a family's most precious possessions. It is easy to understand the Psalmists complaint that the moth consumes and destroys costly garments.

5. As a moth to a flame

Aelian Historia Animalium 12.8

There is a creature called *pyraustēs*, which loves the radiance of fire, and which flutters around burning lamps, and in its eagerness falls into the flame and is consumed. The tragic poet Aeschylus refers to it in this verse: 'I fear the unwary fate of the *pyraustēs*'.

COMMENT: The attraction of the moth to the flame was as proverbial in antiquity as it is today (Beavis 1988: 130): rather than recognising this behaviour in different kinds of moth, the ancients

conceived of the *pyraustēs* as a single creature whose attraction to the flame of a lamp was its distinctive characteristic. Moths were very little understood even by scientific writers: Latin has no specific word for ‘moth’ at all. The only contexts in which they were seriously considered were as pests of beehives – writers on apiculture offer advice on deterring wax moths, including setting up light traps at night (Col. *De Agri.* IX.14.8–9; Ael. *NA* I.58; Plin. *NH* XXI.81) – and in the production of silk, although the *bombyx* or silk moth was not introduced to the ancient world before the reign of Justinian, and even the best informed zoologists demonstrate considerable uncertainty over its nature and life cycle (Ar. *HA* 551b 9–16; Plin. *NH* XI.75–7; Pausan. VI.26.6–9; Procop. VIII.17; Beavis 1988: 140–8). The caterpillars of many moths were well known as pests of crops, orchards and household goods, including the clothes moth (Ar. *Lys.* 729–30; Hor. *Sat.* II.3.118–19; Mart. *Ep.* II.46; Petr. *Sat.* 78; Beavis 1988: 139–40), but these were treated as separate animals, as the connection between the larval form and imago of the moth was not understood.

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
 P.P. Betancourt, *Introduction to Aegean Art* (Philadelphia 2007).
 E. Courtney, *Musa Lapidaria. A Selection of Latin Verse Inscriptions* (Atlanta 1995).
 M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
 B.C. Dietrich, *The Origins of Greek Religion* (Berlin 1974).
 P. Germond, ‘Le papillon, un marqueur symbolique de la renaissance du défunt?’, *Société d'égyptologie de Genève* 28 (2008–10), 35–55.
 P. Houlihan, *The Animal World of the Pharaohs* (London 1996).
 H.G. Larew, ‘Insects: evidence from wall paintings, sculpture, mosaics, carbonized remains, and ancient authors’, in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 315–26.
 A. McFarlane and A.-L. Mourad (eds), *Behind the Scenes. Daily Life in Old Kingdom Egypt* (Oxford 2012).
 R. Parkinson, *The Painted Tomb-Chapel of Nebamun: masterpieces of ancient Egyptian art in the British Museum* (London 2008).

FLEA

The human flea (Gk. *psylla*; Lat. *pulex*) was universal in antiquity and afflicted all from the highest to the lowest: the first-century CE medical writer Celsus includes advice for doctors treating a flea lodged in the ear in his *Therapeutics* (VI.7.9), the solution being to trap it with wool or sticky resin. They are particularly mentioned as a phenomenon of poverty (Aristophanes *Wealth* 537–9), and of public lodgings – Pliny (*NH* IX.154) refers to jumping insects which are found in inns in the summer, and the *Geoponica* (XIII.15) notes their tendency to infest clothes and bedding. Too small (as with all insects) for their life cycle to be understood, they were believed even among scientific writers to be spontaneously generated from dung: Aristotle (*HA* 556b 21–5) notes that fleas and similar creatures are both male and female, and that they produce objects like eggs, but says that these are sterile.

Numerous remedies for flea infestation are proposed in writers on natural history and farming, most using strongly scented herbs as a deterrent, though some are superstitious, such as exclamations to keep the fleas off, and some seem worse than the fleas themselves, such as the suggestion in the *Geoponica* (XIII.15) that one dig a trench under one's bed and fill it with goat's blood to distract the fleas.

Not only humans suffered from fleas; agricultural handbooks note that dogs, cattle and chickens are all susceptible to infestation, often with serious consequences, and suggest herbal remedies of the same kind: see DOG no. 17; Columella *De re rust.* VIII.5.3.

1. The inconsequential flea

a) *Hebrew bible, 1 Samuel 24.14, 26.20*

Against whom has the king of Israel come out? Who are you pursuing? A dead dog?
A flea?

The king of Israel has come out to look for a flea – as one hunts a partridge in the mountains.

b) *Vassal Treaty of Esarhaddon 86–7*

May they squash you as a flea in the palm of your enemies; may your enemies mash you.
Just as the bedbug stinks, so may your breath stink before god, king, and men.

COMMENT: When David finds King Saul taking shelter within a cave at Adullam, he speaks of himself as a poor and contemptible creature, unworthy of a monarch's interest: a dog or a flea. In the Near East, as is clear from the Neo-Assyrian Vassal Treaty, this minuscule insect was a popular image of insignificance and so, in the Hebrew text, David uses the flea to help articulate his projection of self-abasement (Klein 2008: 240).

2. Measuring the flea's jump

Aristophanes Clouds 143–52

Student: I will tell you, but remember that these are sacred mysteries.

Socrates the other day asked Chairephon

How many of its own feet a flea can jump.

Because a flea had just bitten Chairephon's eyebrow,

And then jumped onto Socrates' head.

Strepsiades: And how did he measure it?

Student: Most ingeniously;

He melted some wax, then took the flea

And dipped its feet into the wax

So that when it had dried, the flea was wearing little slippers.

Then he took them off its feet, and was able to measure the distance.

COMMENT: Aristophanes' comedy includes several scenes of activities among the philosophers in Socrates' Refectory, parodying the kinds of questions with which intellectuals occupied themselves. Some are obscure – studying the nature of the sun – and some trivial – how does a gnat make its buzz? This particular example, how far a flea can jump, shows logical thought taken to a ridiculous extreme: while the idea of shoeing a flea is clearly absurd, there is nothing illogical about the proposed method. The study of the flea's jump recurs as a joke at Socrates' expense in Xenophon's *Symposium* (VI.8) and later became proverbial for a trivial debate (Lucian *Philopatri* 12; Davies and Kathirithamby 1986: 149). The story of the experiment, however, manages to tell us a number of things: that fleas were so common as human parasites in classical Greece that their biting and visible jumping were unremarkable; that flea anatomy was generally not well understood, since Aristophanes uses the dual form to refer to its feet, as he would to a human; and that philosophy in the fifth century encompassed practical experimentation as well as abstract thought.

3. The obedient bedbugs

Apocryphal Acts of John 60–1

On the first evening we arrived at a lonely inn, and when there was no bed for the blessed [apostle] John, we witnessed an entertaining episode. There was only one bare bedstead in the place, so we brought our cloaks and spread them over it, and bade him lie down on it to rest, while we others slept on the floor. But as soon as he lay down, John was attacked by a legion of bedbugs; and as they bit him more and more, when the night was half gone he said to them in all our hearing, 'I bid you, bugs, behave yourselves one and all, and leave the house for this night, keeping quiet in one spot, far from the servants of the Lord.' We all laughed and carried on talking, while John turned to sleep. And we talked until daybreak without disturbing him.

As day was breaking I got up, together with Verus and Andronikos. And we saw gathered at the door of the inn a great crowd of bugs. We were amazed to see such a number of them and woke up all our brothers to see, while John was still asleep. When he woke up we told him what we had seen; and he sat up in the bed, looked at the bugs, and said to them, 'Since you have been so obedient in waiting at my command, come back to your own abode.' And as he said this and got up out of the bed, the bugs raced from the door to the bedstead, ran up its legs and hid themselves in its joints. And John said, 'These creatures heard the voice of a man, and remained away from their homes without disobeying. Yet we, though we hear the voice of God, are disobedient and take his commands lightly, and for how long?'

COMMENT: As with fleas, the presence of the bedbug (Gk: *koris*; Lat: *cimex*) in homes and inns is taken for granted in antiquity: a scene in Aristophanes' *Clouds* (698–725) draws its humour from a character being tormented by bugs as he lies in bed, and Plutarch (*Mor.* 1044c–d) mocks the Stoic philosopher Chrysippus, who asserted that all other animals were created for the benefit of humans, by crediting to him the claim that the purpose of bugs was to prevent oversleeping. Fleas and bedbugs were clearly distinguished, the latter's habit of hiding in the crevices of furniture and walls by day being well known; the remedies suggested for them in the *Geoponica* (XIII.14) involve treating bedsteads and walls with various concoctions of tar, vinegar and herbs to deter them. In the story above the apostle John, given the rather dubious honour of sleeping in the only bed in an inn, demonstrates God's control over even the smallest creatures, although his readmission of the bugs in the morning to bite the next guest seems less than public-spirited.

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
R.W. Klein, *1 Samuel* (Nashville 2008).

LOUSE

It is probably true to say that lice were humanity's closest companions in antiquity: references to lice of the hair and body are frequent across all kinds of sources from medical and scientific texts to plays and popular proverbs (Petron. *Sat.* 57: 'You see the lice on others, but not the tick

on yourself’); the Hebrew bible includes a vivid image of a shepherd picking his garment clean of lice (Jeremiah 43.12). Even archaeological evidence has been found, with the discovery of a louse egg in the hair of one of the female victims of the eruption of Vesuvius at Herculaneum (Capasso and Di Tota 1998) and a wooden comb excavated in Antinoë, Egypt (fifth century CE) which contained the remains of seven head lice (Mumcuoglu and Zias 1988).

It was recognised that all species suffer from lice, each animal with its specific kind (Ar. *HA* 557a 4–6), but writers struggled to understand their life cycle: despite Aristotle’s recognition that nits were louse eggs, the belief persisted that lice were spontaneously generated from the flesh or hair (Ar. *HA* 539b 7–14; Plin. *NH* XI.114). It may seem odd that even with the emphasis on baths and bathing in Roman culture, lice should still be so common, and there was certainly a level of stigma attached to them in Roman authors: Pliny tends to refer to them euphemistically as *foeda animalia*, vermin (e.g. *NH* XXXI.65), suggesting distaste, and they were particularly associated with ‘dirty’ philosophers (below no. 2). Nevertheless lice were clearly universal in their spread, and medical writers mention many different treatments for lice of the hair or body, primarily herbal washes or sprinklings of powder (ash, dust, sulphur), but also more extreme remedies such as washing with broth of viper (Plin. *NH* XXIX.121; Beavis 1988: 116 has a complete list). In Egypt, the Ebers Papyrus recommended taking a mouth-full of warm date meal and water and then spitting it onto the skin, ‘in order to drive away the Fleas and Lice which disport themselves. . .’

1. Wig as louse-control

***Wig of human hair, XVIII Dynasty, from Thebes, Egypt
(London, British Museum EA2560). Photograph © The Trustees
of the British Museum***



COMMENT: Ancient Egyptians, at least among the elite of society, were renowned throughout antiquity for their obsessive cleanliness, washing, bathing and anointing their bodies regularly. While this was in part a reflection of high status, the desire for hygiene was also an important aspect. Elite men and women regularly shaved their heads and wore wigs not only as statements of high fashion, but also as a means of combatting head lice for, as Fletcher (2002: 6) points out, lice cannot thrive in the artificial environment of a wig which can be removed at any time. Adult head lice will die after being separated from their host for a day, and their young in an even shorter time.

2. Lice as a fact of life

a) *Athenaeus Deipnosophistai* 586a

And Apollodorus says of Phanostrate in his *Hetairai at Athens* that she was given the nickname Phtheiropyle (Louse-Door), because she was in the habit of standing at her door picking lice off herself.

b) *Pausanias Description of Greece* X.10.6–8

Taras is a colony of the Lacedaimonians, and its founder was a Spartiate, Phalanthus. As he was preparing his colonising venture Phalanthus received an oracle from Delphi, which said that when he saw rain from a clear sky, then he would gain a territory and a city. At the time he neither considered the prophecy himself, nor approached any of the interpreters of oracles, but set off with his ships for Italy; but after he had defeated the barbarians in war, but proved unable to capture any of their cities or claim any territory, he remembered the oracle, and concluded that the gods had given him an impossibility, because he would never see rain from a clear and cloudless sky. His wife, finding him in despair (for she had sailed from home with him), tried to comfort him with other marks of affection, and took her husband's head into her lap to pick the lice out of his hair. And in sympathy with his sorrows she began to cry, seeing her husband's plans with which he had set out come to nothing. She let fall a shower of tears which wetted Phalanthus' head, and he recalled the prophecy, for his wife's name was Aithra (Fair Weather). And the very next night Phalanthus captured Taras, the greatest and most prosperous of the barbarian cities along the coast.

c) *Julian, Misopogon (Beard-Hater)* 228c

Indeed, I have no reason at all to praise myself, and a thousand reasons to find fault, beginning with my face, for I think it is by nature neither handsome nor well-formed nor youthful, and now through stubbornness and peevishness I have added to it this long beard, punishing it, it seems, for the sole reason that it is not handsome; and I endure the lice which scamper about in my beard like wild animals in a thicket.

COMMENT: These three sources show that lice were a normal part of ancient life in both Greece and the Roman Empire, and also were no respecters of social status: the lice in the *Misopogon* are in the beard of the emperor himself. While Julian may be exaggerating – the *Misopogon* is a humorous satire which plays on the idea of philosophers as dirty and neglectful of their appearance – an anecdote in Plutarch (*Mor.* 208e) tells how the Spartan king Agesilaus was bitten by a louse in the middle of a sacrifice, and in general ancient writers treat louse infestations

as perfectly normal, Delousing oneself or others was a regular method of combating lice, and functioned as a form of social interaction; comparative evidence from the Middle Ages can be found in Le Roy Ladurie's study of village life, *Montaillou* (1978: 141–2), showing that women regularly deloused other members of their family, often in public. It is also striking that human lice appear occasionally as part of remedies in veterinary treatments (e.g. Pelag. *Vet.* 122), assuming that they would be readily to hand.

3. Phtheiriasis

Plutarch Life of Sulla 36.2–4

Thus from a mild beginning his disease was aggravated by his mode of living, and for a long time he did not realise that his inner organs were infected, until all of his flesh became corrupted and turned into lice, in such great numbers that although many slaves worked day and night to remove them, they could not take away even part of those which were generated, but his clothes, baths, washbowls and food were filled with the flux and corruption, so many sores did he have. He tried by washing many times a day to clean his body and wash off the infestation, but to no avail: the corruption rapidly took hold and the mass of lice defied all cleansing.

It is said that among the heroes of old Acastus the son of Pelias died of lice in the same way, and of more recent figures Alcman the lyric poet and Pherecydes the philosopher, as well as Callisthenes of Olynthus, when he was held in prison, and also Mucius the lawgiver. And (if we should remember even those who became notable through no merit) the story goes that Eunous, the runaway slave who led the slave uprising in Sicily, also died of lice after he had been captured and taken to Rome.

COMMENT: All ancient writers were convinced that the disease of *phtheiriasis*, lice-disease, existed, whereby a sufferer's flesh formed sores and began bursting into lice, until he was eventually consumed (Ar. *HA* 556 b28–557 a4). It is of course an imaginary condition, as lice live only on the surface of the body, but numerous unpleasant accounts have been preserved, together with a list of prominent victims (Beavis 1988: 117). The Hebrew bible's 'plagues of lice' on people and their animals, which caused the Egyptians to suffer from festering boils and skin diseases (Exodus 8.17, 9.10), may also represent the same idea.

Two schools of thought can be found among modern commentators: either that *phtheiriasis* is entirely invented for moral purposes, to give a suitably distressing end to those who were seen to deserve it, or that it is a misinterpretation of the superficial infestation of scabies, caused by the scabies mite which burrows under the skin (Keaveney and Madden 1982; Beavis 1988: 116–18). Neither interpretation is wholly satisfactory: against the first idea it can be argued that not all of the victims said to have died from *phtheiriasis* were in fact evildoers – Alcman the lyric poet is named, for example, and philosophers including Socrates, Plato and Speusippus – and against the second that in every case a separate fatal disease would need to be concurrent with scabies. It perhaps reflects more simply fear and disgust at severe infestation, which could be considered serious enough to merit divine intervention: the inscriptions recording miraculous cures at the shrine of Asclepius at Epidaurus includes a cure for lice: the supplicant, Cleinatas of Thebes, spent the night in the temple, and dreamed that Asclepius stripped him naked and brushed the lice off his body with a broom, and when he woke he was cured (*IG* IV² 121.B28).

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
L. Capasso and G. Di Tota, 'Lice buried under the ashes of Herculaneum', *The Lancet* 351 (1998), 992.
M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
J. Fletcher, 'Ancient Egyptian hair and wigs', *The Ostrakon: The Journal of the Egyptian Study Society* 13.2 (2002), 2–7.
A. Keaveney and J. Madden, 'Phthiriasis and its victims', *Symbolae Osloenses* 57 (1982), 87–99.
F. Le Roy Ladurie, *Montaillou: Cathars and Catholics in a French village 1294–1324* (trans. B. Bray) (Harmondsworth 1978).
Y.K. Mumcuoglu and J. Zias, 'Head lice, *Pediculus humanus capitis* (Anoplura: Pediculidae) from hair combs excavated in Israel and dated from the first century BC to the eighth century AD', *Journal of Medical Entomology* 25 (1988), 545–7.

WEEVIL

Several species of beetle have evolved to live as companions to humans in stored grains or legumes. The association between weevils and humans began with the origins of agriculture, and the grain weevil (*Sitophilus granarius*) and saw-toothed granary beetle (*Oryzaephilus surinamensis*) have since populated the entire world as synanthropic species. As well as feeding on the stored produce, the adult lays an egg in a single grain of corn or rice, and the larva grows inside it, emerging as a new adult. Buckland (1991: 70) emphasises the scale of loss and spoilage of stored crops through insect infestation, estimating that as much as 10 per cent of the modern crop is lost: losses in antiquity when there were few effective pesticides, would of course have been much higher.

Grain pests have been detected in the ancient world from the earliest times: they have been found in Mesopotamia, Egypt, and at Bronze Age sites in Greece (Panagiotakopoulou et al. 1995), while at Pompeii carbonised beans have been discovered with weevils preserved inside them (Larew 2001: 317 and fig. 258). They were a continual concern among writers on agriculture under the generic terms *tal'ašu* (Akkadian), *kis* (Greek) and *curculio* (Latin). Of course few distinctions were made between species, or between those insects which attacked crops in the field and those in storage; similarly insect life cycles were not understood, the universal belief being that weevils were spontaneously generated in stored grain or pulses (Theophr. *HP*VIII.11.1–3). The irony is that these species, being completely dependent on human activity for their propagation and spread – *S. granarius* is flightless and is unknown in the wild – were one of the greatest animal beneficiaries of the classical world. As the Roman Empire spread across northern Europe, the army gathered, transported and stored huge amounts of grain, inadvertently taking grain pests with them. In Roman Britain the grain weevil first appears in the archaeological record at the time of the Roman occupation, and it disappears again in the early medieval period (Smith and Kenward 2011). It seems certain that by transporting grain long-distance and constructing large-scale granaries, the Romans dramatically extended the weevils' range and gave them the conditions in which they could thrive.

1. Keeping weevils out of granaries

Columella De Agricultura I.6.12–17

Nor does it escape my notice that the best storage for grain is considered by some to be a granary constructed with a vaulted roof, the earth foundation of which, before it

is paved, should be dug over and wetted with fresh and unsalted oil lees, then pounded down as with *opus signinum*. Then when it has dried it should be covered in a similar fashion with a paving of tiles, made of lime and sand mixed with oil lees in place of water, the tiles rammed in forcibly and polished, and all the joints between walls and floor sealed with tile dust. This is because cracks often appear in these areas of the building, which make holes and hiding-places for underground animals. The granary should be divided into separate bins for each different crop. The walls should be coated with a mixture of clay and oil lees, to which dried wild olive leaves are added in place of chaff, or, if no wild leaves are available, leaves of cultivated olive. Once this coating on the walls has dried, more oil lees should be sprinkled about, and when this too has dried, the grain can be brought in. This treatment seems to preserve stored grain from attack by noxious weevils and similar creatures very effectively; if the grain is not stored carefully it is rapidly consumed by them. But the type of granary which I have described should only be built in a dry location on the farm, lest even the toughest grain be destroyed by mould. If this were not the case, it would be possible to store grain in pits, as is done in some provinces across the sea: they dig pits called *siri* in the manner of a well, and the earth receives back the fruits which it has produced. But in our country where the earth is moist, granaries supported above the ground are better, with the above attention to walls and floors because, as noted, if the floors and walls are treated in this way, they keep out weevils.

When this kind of infestation occurs, many think that it can be stopped if the affected grain is winnowed in the granary and cooled down (so to speak). But they are greatly mistaken: for this does not get rid of the weevils, but spreads them through the whole heap, whereas if it is left untouched the weevils infest only the topmost layer, for they breed only in the top palm's depth. It is far better to lose only the part which is already damaged, than to endanger the whole harvest. And when the time comes to use it, it is easy to remove the damaged surface and use the untouched grain below.

COMMENT: Columella's careful instructions for building a granary which will deter grain pests are repeated in most other writers on agriculture (Varro *DRR* I.57–8; Pliny *NH* XVIII.303–8): all advocate the sealing of walls and floors, though granaries with floors raised above ground level are also mentioned. Earlier in his book (I.6.9) Columella recommends that grain and other dry products be stored in lofts, but the granary proposed here is of a less complex design. Additionally a variety of different methods of deterring pests are recommended, including the use of scented herbs such as coriander or fleabane, vinegar, chalk and wormwood. There is no indication that any of these were particularly successful, and some superstitious methods are also included: Varro advises surrounding weevil-infested grain with pots of water, which he says will cause the weevils to come out and drown themselves (I.63), while Pliny recommends the use of a toad as a charm (see *FROG* no. 9). The final assertion, that weevils infest only the topmost layer of grain, is untrue, but storage of grain in pits was an effective method in hotter countries: Varro says that wheat could be safely stored in this way for fifty years, and millet for a hundred.

Archaeology shows us some further strategies for treating weevil infestation, and a striking example is offered by the Roman warehouse at York (Hall and Kenward 1976): excavation revealed the remains of a warehouse dating from 90–110 CE, which was completely infested with grain beetles. As this was a riverside warehouse through which all unloaded grain would have passed, the infestation would thus have spread uncontrollably, and drastic action was taken: the warehouse was destroyed and the site covered with a layer of clay 40cm thick, on top of which a new warehouse was built. The efficacy of the action is shown by a much reduced level of insect

finds in the second warehouse. On an individual scale a farmer with a severely infested granary might simply burn it down and build a new structure: Buckland (1991: 76) suggests that evidence of burning of farm structures might be interpreted as reflecting attempts at pest control rather than enemy attack.

2. A Latin riddle

Symphosius Aenigmata 24

I am no good to farmers, an unwelcome guest to the crops,
Small in size, I am not called by my right name,
Unloved by Ceres, my appetite is huge.

COMMENT: This fifth-century CE Latin riddle describes the *curculio*, plainly a creature familiar in ancient households: the reference to its being wrongly named seems to refer to the alternative form *gurgulio*, deriving from its voracious appetite (Gratwick 1981: 340–1). Popular references to weevils carry an air of resignation – Plautus *Curc.* 586–7, for instance, refers to 500 weevils hiding among the grain. A certain level of insect infestation of grain and other foodstuffs was clearly inevitable (and has been so until modern times), and in the 1980s Osborne carried out a famous experiment to show that the remains of grain beetles found in ancient cesspits reflected not the dumping of infested grain, but human consumption. He acquired fifty weevils from his university's department of zoology, boiled them in vegetable soup and ate them (noting that 'such a concentration would not deter a hungry man'), then sieved his faeces to recover the digested remains for comparison with ancient finds (Osborne 1983). The implication of his experiment is that throughout the ancient past the consumption of spoiled grain was unavoidable: only the truly inedible was thrown away (Dickson et al. 1979).

Bibliography

- I.C. Beavis, *Insects and Other Invertebrates in Classical Antiquity* (Exeter 1988).
P.C. Buckland, 'Granaries, stores and insects: the archaeology of insect synanthropy', in F. Sigaut and D. Fournier, *La préparation alimentaire des céréales* 26 (1991), 69–81.
J.H. Dickson, C.A. Dickson and D.J. Breeze, 'Flour or bread in a Roman military ditch at Bearsden, Scotland', *Antiquity* 53 (1979), 47–51.
A.S. Gratwick, 'Curculio's last bow: Plautus *Trinummus* IV.3', *Mnemosyne* 34 (1981), 331–50.
A.R. Hall and H.K. Kenward, 'Biological evidence for the usage of Roman riverside warehouses at York', *Britannia* 7 (1976), 274–6.
H.G. Larew, 'Insects: evidence from wall paintings, sculpture, mosaics, carbonized remains, and ancient authors', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 315–26.
P.J. Osborne, 'An insect fauna from a modern cesspit and its comparison with probable cesspit assemblages from archaeological sites', *Journal of Archaeological Science* 10 (1983), 453–63.
E. Panagiotakopoulou, P. Buckland, P.M. Day, A.A. Sarpaki and C. Doumas, 'Natural insecticides and repellents in antiquity', *Journal of Archaeological Science* 22.5 (1995), 705–10.
D. Smith and H. Kenward, 'Roman grain pests in Britain: implications for grain supply and agricultural production', *Britannia* 42 (2011), 243–62.

SNAIL

Snails (Hebrew *shabluwl*, Greek *cochlia*, Latin *coclea*, *helix*) are native across all parts of the ancient Mediterranean, on land, in fresh water and in the sea. Pliny the Elder has relatively little to say about them in his books on animals, except for the most valued snail in antiquity, the murex or purple-snail (see MUREX), but in his medical books (NH 30–2) he distinguishes many types of land snail – broad snails, white snails, cave snails, wood snails, shell-less and edible snails. Aristotle (HA 527) gives a very detailed and largely correct account of snail anatomy and behaviour, and Pliny (NH 8.139–40) discusses their hibernation, although oddly at 11.140 he states that snails do not have eyes, but use their horns to feel their way. For most ancient people, however, snails were either a food, readily available to the poor but also the subject of connoisseurship by the wealthy, or a remedy for diseases: crushed, cooked or even live snails, or snail slime, are suggested as cures for conditions including stomach problems, joint pains, headaches, asthma and paralysis (NH 30 *passim*).

The references to ‘shell-less’ snails are intriguing: Pliny is not referring as one might expect to slugs, for which he uses a separate term (*limacus*), but to a particular species of *coclea* which he says (30.55) is found mostly in Africa. The same idea seems to find expression in a story told by Aelian (*On Animals* 10.5) about a kind of snail called the *areion* which avoids predatory birds by slipping out of its shell and going off to feed naked; the birds swoop down on the shells but find them empty, and once the snails have fed, they return and put their shells on again. The most remarkable snail in antiquity, however, is undoubtedly the mechanical one created for Demetrius of Phaleron, governor of Athens under Macedonia at the end of the fourth century BCE; according to Polybius (12.13) this marvel led his processions, emitting a trail of slime as it went. One has to suppose that it was considerably larger than life-size, and Rehm (1937) suggests a reconstruction in which the snail was carried on a modified cart, its shell concealing a treadmill which moved it at an appropriately slow pace.

1. Slime

Hebrew bible, Psalms 58.8

Break the teeth in their mouths, O God;
Lord, tear out the fangs of those lions!
Let (the wicked) vanish like water that flows away;
when they draw the bow, let their arrows fall short.
May they be like a snail that melts away as it moves along,
like a stillborn child that never sees the sun.

COMMENT: The snail (or perhaps the slug) gets short shrift in the Hebrew bible. The Psalm passage refers to the fact that the snail leaves a trail of mucus (i.e. it melts) as it slowly crawls along. Of course, snails do not ‘melt away’ because its glands continually manufacture fresh mucous. But the image is an effective one for the Psalmist, evoking the complete disintegration of wickedness.

2. The proverbial snail

Fragments of Greek comedy

Philemon fr. 104

How clever a creature the snail is, by Zeus!
If he ever finds himself with a bad neighbour
He just takes up his house and moves away,
And lives free from care, leaving those who annoy him behind.

Amphis fr. 13

Plato,
Really the only thing you know is how to sneer,
Raising your eyebrows haughtily like a snail.

COMMENT: The proverbial qualities of the snail were as often-quoted in antiquity as today: for Hesiod in archaic Greece it was the 'house-carrier' (*phereoikos*), and the late Latin writer Symphosius turned it into a riddle: 'I carry my house with me, always ready to migrate. . . ' (*Anth. Lat.* 286, no. 18; Apthorp 2007). Elsewhere Plautus (*Poenulus* 532) uses the snail as the epitome of slowness. Less usual, though, is Amphis' comparison above, from his lost comedy *Dexidemides*, in which the philosopher Plato who looks down his nose at the ordinary citizens is compared to a snail raising its horns (Olson 2007: 243). Yet despite this cluster of associations, snails figure only once in the fables of Aesop (Halm 214), and that in a rather callous joke about their whistling as they are roasted.

3. Snail farming

Varro De Re Rustica 3.4.1–5

Then Axius said, 'Merula, my friend, Appius has made your task much easier; he has briefly explained to us all about the second kind of game, and I won't ask about dormice or snails, which is all that remains to discuss, for that cannot be any great matter.' 'Ah,' said Appius, 'but the latter is not as simple as you think, my dear Axius. For a suitable site for cultivating snails in the open needs to be chosen, which you should completely surround by water, so that when you put the snails there to breed, you don't end up looking for them rather than for their offspring. You need to hem them in with water, or be prepared to employ a runaway-catcher. The best side is not exposed to the sun's heat, and attracts the dew; if no such place exists naturally, as is often the case in sunny areas, and you don't have a shady place where you can build one under an overhang or beneath a hill with a lake or river below, you need to create a damp place. This can be achieved by laying a pipe and adding to it small spouts through which the water can play, so that it falls onto a stone and is widely dispersed.

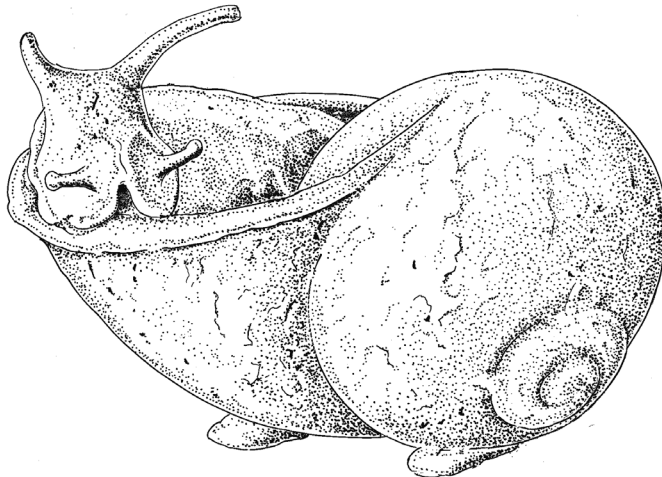
Snails need little food and no person to feed them; they crawl about and find their food not only on the ground but even by climbing up the walls (if they are not prevented by the stream). Indeed they live for a long time even when on sale, by chewing the cud, for which purpose the sellers sprinkle in a few laurel leaves for them, and some bran. They can be cooked alive or dead, and it is often hard for cooks to tell the difference.

There are many different kinds of snail, such as the small white ones which come from reate, and the very big ones from Illyria, and the medium-sized African kind; although they do differ in both size and distribution in these regions, for there are also extremely large snails in Africa which are called *solitannae*, so big that their shells will hold 80 *quadrantes*; and in the same way in other regions the same species also have both large and small kinds. Snails produce countless young which are tiny and have soft shells; these become harder over time. If you build large enclosures for them in the courtyard it will generate a large profit. Snails can also be fattened in the following way: by coating the inside of a perforated jar with must and spelt and putting the snails in it to feed, although it is important that the jar is perforated to let the air in; for the snail is naturally hardy.

COMMENT: In his third book Varro gives details for cultivating some of the more unusual cash crops in first-century BCE Italy, including this description of snail-raising. Although the construction of dedicated misting pipes for a snail enclosure seems extreme, there is no doubt that snails were a sought-after food. In Greece land snails are more often presented as part of a rustic diet (Theoc. 14.17; Poliochus fr. 2), and the same was true more generally: Sallust *Jug.* 93.2 records that during Marius' siege of a fortress in Numidia in 106 BCE a secret path into the fortress was discovered by a soldier who was gathering snails. Upper-class Romans, however, became connoisseurs of snails: as well as those specially mentioned here, Pliny says that snails from Astypalaea, Sicily and the Balearic Islands are prized (*NH* 30.45), while Strabo (*Geog.* 13.1.15) says that the finest snails come from Linum in Asia Minor. As Varro says, snail-rearing for the gourmet market could be very profitable, although the concept of 'fattening' is not really applicable given the slow growth rate of snails. His comments on selling snails and on fattening them both seem to relate to the necessary preparation of snails for eating: they must either be starved for a few days before cooking, or fed on foods palatable to humans. Grazing the snails on particular foods can impart flavour to their flesh appropriate to the intended recipe, even if it will not make them noticeably larger.

4. Snail lamps

***Bronze lamp, Naples Archaeological Museum no. 72261,
from Pompeii, first century CE (drawing by Tessa Rickards)***



COMMENT: This delightful Roman lamp, in the form of a snail emerging from its shell, was found in Pompeii (Mele 1983: no. 380). The shell acts as the reservoir for the oil, provided with little rests for stability, and the emerging body supports the wick: close observation is evident in the rippling of the mantle as the snail extends its head and body. Other similar metal lamps are modelled on the empty snail-shell only (Mele 1983: nos 377–9, 381), and given their relatively small size, were probably used together, suspended from a candelabrum with leaf and floral decoration (Mele 1983: 159). One can see the humour in a succession of snail-shell lamps ending with one whose inhabitant is still in residence. This is one of relatively few representations of the snail in ancient art; too small to appear often in vase-painting or wall-painting, snails appear mainly as tiny decorations on occasional sculptures (Reese 2001: 312).

Bibliography

- M.J. Apthorp, 'Symphosius' mobile snail', *Acta Classica* 50 (2007), 147–51.
A. Dalby, *Food in the Ancient World, from A to Z* (London 2003).
S.D. Olson, *Broken Laughter: select fragments of Greek comedy* (Oxford 2007).
A. Rehm, 'Antike "Automobile"', *Philologus* 92 (1937), 317–30.
D.S. Reese, 'Marine invertebrates, freshwater shells, and land snails: evidence from specimens, mosaics, wall paintings, sculpture, jewelry, and Roman authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 292–314.
N. Valenza Mele, *Catalogo delle Lucerne in bronzo: Museo nazionale archeologico di Napoli* (Rome 1983).

Marine creatures

FISH

The piscine life of the ancient Mediterranean was wide and various, and fish were both an important resource and symbolically significant among all peoples of the region. The cultural importance of the fish throughout Mesopotamia cannot be underestimated. The very early Mesopotamian concept of creation, for example, is bound up in the notion of *abzu*, the 'hidden' subterranean ocean associated with the god Enki which is manifested too in the overflowing river waters fertilising the dry land and the southern marshes of Mesopotamia, abounding in all types of fish. Fish were Enki's gift to the world and were therefore regarded as symbols of fertility and regeneration. The goddess Nanše was the patron of fish and was often depicted clothed in fish skins and holding a fish-sceptre in her hand. Fish were also believed to have magical and medical properties and the gall of an eel was considered to be particularly effective as an eye salve (Tobit 6.2–9, 8.2–5). Fish entrails were used in many forms of exorcism; in order to drive out daemons on a wedding night, for example, the heart and liver of a fish were laid out on the ashes of incense which would drive the evil spirit away (Ringgren 1978).

Fish were abundant in the Nile, in the Red Sea and off the Mediterranean coast of Egypt. From the Old Kingdom onwards, Egyptian artists took care and delight in the careful depiction of fish in tomb paintings and on jewellery and decorative items (Danelius and Steinitz 1967; McFarlane and Mourad 2012: 13, 109–24). However, Egyptian attitudes towards fish as sources of food were at best ambivalent and seem to have changed over time and differed from region to region. There is little doubt that much of the populace relied on fish as a major source of protein and used well-honed fishing-skills, employing woven drag nets, baskets made from willow, harpoons, lines and hooks to catch them. Different fish were caught in different ways, as the Middle Kingdom text, *The Eloquent Peasant*, suggests: 'The hand-net fisher catches the *mhjt(?)*-fish. The */// i* -fisherman kills the *iy*-fish. The harpoonist kills the *wbb*-fish. The *dbh*-net fisher is after the *p3gr*-fish.' It is almost impossible to be precise about the species of fish catalogued in this text, but it is probable that Nile perch, catfish and eels were among the most common fish (Brewer, Friedman and Friedman 1989). Egyptian literature casts professional fishing as one of the worst trades – it was a dangerous way to earn a living, because their small boats and skiffs could be overturned by hippos and crocodiles. Moreover, fishermen were found repugnant because they tended to smell of their catch; needless to say, the smell of a catch of fish on a hot day quickly becomes hard to

bear since it clings to, and lingers on, the skin and clothing. In one text a fisherman laments that, 'my name is detested . . . [more than the smell of] a catch of fish on a day of catching when the sky is hot' (Faulkner 1973).

Egyptians also seem to have disliked fish because of their conceived link with the god Seth, who by the first millennium BCE had become an incarnation of malevolence. The Late Period Piankhi Stele therefore fittingly refers to fish-eaters as 'abominations'. Yet while fish were never offered to the gods (in contrast to Mesopotamian tradition, below no. 4), they were nevertheless symbols and companions of several deities and they enter frequently into their mythology. The goddess Hatmehit of Mendes was depicted as a fish or as a woman with a fish on her head and the goddess Neith was guardian of a species of perch which were venerated at her shrine at Esna. Eels were often mummified, placed in bronze coffins and offered as votives to the god Atum; the miniature coffins were frequently adorned with little figurines of the eels themselves. According to the popular myth the Elephant-snout fish (or *Oxyrhynchus*) had swallowed the penis of Osiris after his dismemberment by Seth, although in some accounts, the Nile carp digested parts (or all) of the god's genitalia. The tilapia fish was also regarded as a symbol of rebirth (below no. 5).

Greek and Roman writers and artists were both interested in and knowledgeable about fish: Pliny (*NH* IX.43) lists 104 species of sea animal, and Oppian in his *Halieutica* more than 120 (including shellfish, cephalopods and cetaceans). The Greek and Latin vocabulary for fish is extensive, although the names do not always map easily on to modern species, often including finer distinctions than are current today, e.g. giving different names to the various age-stages of the tuna. (Where identification is unproblematic, modern names have been used in translation, but those fish which cannot easily be identified have been left untranslated.) Fish of all kinds are also very common motifs in ancient art, with artists showing keen discrimination between species.

Several literary studies of fish have come down to us, notably the *Halieutica* (*On Fishing*) attributed to Ovid and that of Oppian, and others are preserved through Athenaeus' *Deipnosophistai*. Most discuss either the catching or the cooking of fish: while fish offered a resource for rich and poor alike, the perishability of seafood meant that fish was considered a luxury food, and we see an emphasis on delicacies such as eels in Greece and the mullet in Rome. Fishing was, by its nature, an unpredictable occupation: a lucky catch could make an individual or community rich, and there is a recurrent story in the classical tradition of the poor fisherman who catches a monster fish and takes it to the ruler as a gift, in hope of converting his good fortune to permanent gain (Hdt III.42.1–2; Suet. *Tib.* 60; Juvenal *Sat.* 4.37–71). On the other hand, the *Greek Anthology* includes an epigram (VI.24) on a fisherman who dedicated his nets to Astarte after bringing in only many hauls of seaweed. Later, under the Roman Empire, we find the development of fishing on an industrial scale in the Mediterranean, with factories processing salt fish and fish-sauce for export all over the empire (Marzano 2013: ch. 3).

Only in Roman Italy can we detect an interest in fish on an individual level: they are not mentioned as pets in Greece, but as fish-keeping became a preoccupation of the Roman aristocracy, so the idea developed that an individual fish or fishes could be kept and trained to respond to their owner; we even hear of named fish, though no names have survived from antiquity. The role of fish in Greek and Roman religion is harder to quantify: fish were not commonly identified with particular deities, but at certain religious sites the fish in springs or ponds were considered sacred, and some even acted as oracles to transmit the will of the god (Ael. *HA* XII.1–2; Plin. *NH* XXXI.22, XXXII.17).

1. The debate between Bird and Fish

Sumerian literary composition, lines 13–190 (see Vanstiphout 1991 and 1997: 581–4)

Enki knit together the marshlands, making young and old reeds grow there; he made birds and fish live in the pools and lagoons . . . ; he gave . . . all kinds of living creatures as their sustenance, . . . placed them in charge of this abundance of the gods. When Nudimmud, noble prince, the lord of broad wisdom, had fashioned . . . , he filled the reedbeds and marshes with fish and birds, indicated to them their positions and instructed them in their divine rules.

Then Fish laid its eggs in the lagoons; Bird built its nest in a gap in the reedbeds. But Bird frightened the Fish of the lagoons in its . . . Fish took up a stand and cried out. Pompously it initiated hostilities. It roused the street by quarrelling in an overbearing manner. Fish addressed Bird murderously:

‘. . . Bird. . . there is no insult . . . ! Croaking . . . noise in the marshes . . . squawking! Forever gobbling away greedily, while your heart is dripping with evil! Standing on the plain, you can keep pecking away until they chase you off! The farmer’s sons lay lines and nets for you in the furrows. The gardener sets up nets against you in gardens and orchards. He cannot rest his arm from firing his sling; he cannot sit down because of you. You cause damage in the vegetable plots; you are a nuisance. In the damp parts of fields, there are your unpleasing footprints. Bird, you are shameless: you fill the courtyard with your droppings. The courtyard sweeper-boy who cleans the house chases after you with ropes. By your noise the [house] is disturbed; your din drives people away. They bring you into the fattening shed. They let you moo like cattle, bleat like sheep. They pour out cool water in jugs for you. They drag you away for the daily sacrifice. The fowler brings you with bound wings. The fisherman brings you into the palace. They tie up your wings and beak. Your squawking is to no profit; what are you flapping about? With your ugly voice you frighten the night; no one can sleep soundly. Bird, get out of the marshes! Get this noise of yours off my back! Go out of here into a hole on the rubbish heap: that suits you!’

Thus Fish insulted Bird on that day. But Bird, with multi-coloured plumage and multi-coloured face, was convinced of its own beauty, and did not take to heart the insults Fish had cast at it. As if it was a nursemaid singing a lullaby, it paid no attention to the speech, despite the ugly words that were being uttered. [Then Bird answered Fish]

‘How has your heart become so arrogant, while you yourself are so lowly? Your mouth is flabby (?), but although your mouth goes all the way round, you cannot see behind you. You are bereft of hips, as also of arms, hands and feet – try bending your neck to your feet! Your smell is awful; you make people throw up, they sneer at you! No trough would hold the kind of prepared food you eat. He who has carried you dare not let his hand touch his skin! In the great marshes and the wide lagoons, I am your persecuting demon. You cannot eat the sweet plants there, as my voice harasses you. You cannot travel with confidence in the river, as my storm-cloud covers you. As you slip through the reedbeds you are always beneath my eyes. Some of your little ones are destined to be my daily offering; you give them to me to allay my hunger. Some of your big ones are just as certainly destined for my banqueting hall . . . in the mud. [. . .] But I am the beautiful and clever Bird! Fine artistry went into my adornment. But no skill has been expended on your [un]holy shaping! Strutting about in the royal palace is my glory; my warbling is considered a decoration in the courtyard. The sound

I produce, in all its sweetness, is a delight for the person of Shulgi, son of Enlil. Fruits and produce of gardens and orchards are the enormous daily offerings due to me. Finest groats, flour, malt, hulled barley and emmer (?) are sweet things to my mouth. How do you not recognise my superiority from this? Bow your neck to the ground!’

Thus Bird insulted Fish on that occasion. Fish became angry, and, trusting in its heroic strength and solidness, swept across the bottom like a heavy rain cloud. It took up the quarrel. It did not take to heart the insults that Bird had cast at it. It could not bring itself to submit, but spoke unrestrainedly. Again Fish replied to Bird:

‘Chopped-off beak and legs, deformed feet, cleft mouth, thin tongue! You clatter away in your ignorance, with never any reflection! Gluttonous, malformed, filling the courtyard with droppings! The little sweeper-boy sets nets in the house and chases you with ropes. The baker, the brewer, the porter, all those who live in the house are annoyed with you. Bird, you have not examined the question of my greatness; you have not taken due account of my nature. You could not understand my weakness and my strength; yet you spoke inflammatory words. Once you have really looked into my achievements, you will be greatly humbled. Your speech contains grave errors; you have not given it due consideration. I am Fish. I am responsibly charged with providing abundance for the pure shrines . . . To the august platform of the great offerings of the gods, I go proudly with head raised high! Just like Ashnan I am here to satisfy the hunger of the Land. I am her helper. Therefore people pay attention to me, and they keep their eyes upon me. As at the harvest festival, they rejoice over me and take care of me. Bird, whatever great deeds you may have achieved, I will teach you their pretentiousness. I shall hand back to you in your turn your haughtiness and mendacious speech.’

Thereupon Fish conceived a plot against Bird. Silently, furtively, it slithered alongside. When Bird rose up from her nest to fetch food for her young, Fish searched for the most discreet of silent places. It turned her well-built nest of brushwood into a haunted house. It destroyed her well-built house, and tore down her storeroom. It smashed the eggs she had laid and threw them into the sea. Thus Fish struck at Bird, and then fled into the waters. Then Bird came, lion-faced and with an eagle’s talons, flapping its wings towards its nest. It stopped in mid-flight. Like a hurricane whirling in the midst of heaven, it circled in the sky. Bird, looking about for its nest, spread wide its limbs. It trampled over the broad plain after its well-built nest of brushwood. Its voice shrieked into the interior of heaven like the Mistress’s.

Bird sought for Fish, searching the marshes. Bird peered into the deep water for Fish, watching closely. Extending its claws, it just snatched from the water Fish’s tiny fish-spawn, gathering them all together and piling them up in a heap. Thus Bird took its revenge and . . . its heart. Again Bird replied to Fish:

‘You utter fool! Idiot, muddle-headed Fish, you are out of . . .! The mouths of those who circle (?) the quay never get enough to eat, and their hunger lasts all day. Swine, rascal, gorging yourself upon your own excrement, you freak! You are like a watchman living on the walls (?), . . .! Fish, you kindled fire against me, you planted henbane. In your stupidity you caused devastation; you have spattered your hands with blood! Your arrogant heart will destroy itself by its own deeds! But I am Bird, flying in the heavens and walking on the earth. Wherever I travel to, I am there for the joy of its . . . named. . . , O Fish, . . . bestowed by the Great Princes. I am of first-class seed, and my young are first-born young! . . . went with uplifted head . . . to the lustrous E-kur . . . until distant days . . . the numerous people say. How can you not recognise my pre-eminence? Bow your neck to the ground.’

Again Bird had hurled insults at Fish. Then Fish shouted at Bird, eyeing it angrily: 'Do not puff yourself up from your lying mouth! Our judge shall take this up. Let us take our case to Enki, our judge and adjudicator.'

And so with the two of them jostling and continuing the evil quarrel in order to establish, the one over the other, their grandness and pre-eminence, the litigation was registered within Eridu, and they [put forward their argumentation] . . . thrashing about (?) amid roaring like that of a bull, . . . rushed forward like . . . They requested a verdict . . . from Shulgi, son of Enlil.

(Bird speaks:) 'You . . . , lord of true speech, pay attention to my words! I had put . . . and laid eggs there . . . had bestowed . . . and had given as their sustenance. After . . . had started . . . , . . . he destroyed my house. He turned my nest of brushwood into a haunted house. He destroyed my house, and tore down my storeroom. He smashed my eggs and threw them into the sea . . . examine what I have said. Return a verdict in my favour.' . . . investigating . . . she prostrated herself to the ground.

. . . announced (?) the word . . . august, spoke from the heart: 'Your words are sterling words, such as delight the heart.' (Shulgi speaks:) 'For how long are [you] going to persist (?) in quarrelling?' Like . . . came out supreme. Like butting . . . , they jostled each other.

(Fish speaks:) ' . . . let it be favourable to me!' (Shulgi speaks:) 'I shall instruct you in the divine rules and just ordinances of our dwelling-place. Like (?) Enki, king of the *abzu*, I am successful in finding solutions, and am wise in words.' He answered Bird and Fish:

'To strut about in the E-kur is a glory for Bird, as its singing is sweet. At Enlil's holy table, Bird . . . precedence over you . . . ! It shall utter its cries in the temple of the great gods. The Annuna gods rejoice at its voice. It is suitable for banquets in the great dining hall of the gods. It provides good cheer in [the king's] palace. . . . with head high, at the table of Shulgi, son of Enlil. The king . . . long life.

[1 line fragmentary]

Fish . . . in splendour . . . '

Thereupon Fish . . . Bird.

[6 lines missing or fragmentary]

. . . Enki . . . bestowed.

[1 line fragmentary]

In the *abzu* of Eridug . . . Bird . . . Because Bird was victorious over Fish in the dispute between Fish and Bird, Father Enki be praised!

COMMENT: *The Debate between Bird and Fish* is one of the finest and most amusing of the surviving Sumerian 'debate' genre of literature (see SHEEP no. 6 and HORSE no. 1a for a Babylonian variation). The poem is a short creation epic and notes how water, fit for humans to drink, was created when Enki, lord of wisdom, created the Tigris and Euphrates riverbeds and allowed fresh water to flow into them from the mountain springs. Enki then created the other watercourses, reed-beds and marshes as well as sheepfolds, filling them with fish and birds.

The bird and the fish are created in striking detail: their natural habits are very well recounted and their argument is acrimonious. The bird is as flamboyant as the fish is dull and morose; the bird lives in a world of sound and colour while the fish inhabits the murky depths of darkness and silence; the bird is vain, squawking, and a pest – he leaves his dropping everywhere – while the fish, lacking a recognisable body, stinks and festers in the slime-filled waters. The brief narrative at the centre of the poem describes how the fish overturns the bird's nest and smashes its eggs and, in retaliation, how the bird eats the fish's spawn from out of the water (a similar battle

is played out between the turtle and the heron in another debate poem; see TORTOISE no. 2). The hostilities escalate until Enki and Shulgi give their adjudication: the bird is the victor because it provides pleasure to mankind with its beauty of plumage and voice.

2. The house of fish: the first aquarium?

a) Sumerian literary composition (after Kramer 1956; Civil 1961; Black et al. 2004: 243)

My Fish, a house. . .

My Fish I have built a house for you, I have built a granary for you,
In the house an extra court, an extended sheepfold, I have built for you,
Its centre I have covered with incense, I have dug (?) a well of
jubilation, a place that gladdens the heart,
No one can approach your closely threaded (?) house, I have
bedecked (?) it with plants, in this place of happiness, water of joy I [. . .]
In the house, there is food, food of the best quality,
In the house, there is food, food in good condition.
The flies cannot be chased away from your house, which is a drinking place.
Your renown (is) an acclaim which cannot be spoiled.
The threshold and the bolt, the ritual flour, the censer, are in place,
The scent of the house, is like the fragrance of a cedar forest.
In the house, there is beer, there is good beer,
There are sweet beer and honeyed cakes, (stretching) as far as the reed-fence.
Let your acquaintances come,
Let your dear ones come,
Let your father (and) ancestor come,
Let the sons of your elder brother (and) the sons of your younger brother come,
Let your little ones (and) your big ones come,
Let your wife (and) your children come,
Let your companions (and) friends come,
Let your brother-in-law (and) your father-in-law come,
Let the crowd, alongside of your entrance, come,
Do not leave your neighbours (outside), not even one of them.
Enter, my beloved son,
Enter, my goodly son;
The day will pass, the night is coming,
The moonlight . . . will enter (the house);
When the day has passed, when the night has come,
The one who enters will repose; a place I have prepared for you,
In its midst, I appoint a seat for you,
My fish, my sleeping ones will never be disturbed,
My residents will never start any quarrel.
Enter, my beloved son,
Enter, my goodly son.
Like a brackish canal, which no (longer) has any ditches,
Like the river silt, which cannot be moved away,
Like flowing water, your bed will be spread,

After the moonlight has entered (the house), your bed will be spread;
 You come too, (cast) your eyes at the shelter,
 Like a [. . .], you come too to your bedding ground, (cast) your eyes at
 the shelter,
 Like a dog, you come too to your sniffing place, (cast) your eyes at my
 shelter,
 Lik[e . . .], you come too, to your . . . standing place, (cast) your eyes
 at the shelter,
 You come too, like an ox, to your stall, like a sheep, [to your] sheepfold,
 (cast) your eyes at the shelter.
 If you indeed, like an ox, to your stall [. . .
 Enter, Si[n will rejoice with you];
 If you indeed, like a sheep, to your sheepfold [. . .
 Enter, Dumuzi [will rejoice with you].
 [When you] raise (your) head like an ox to your stall,
 The lord Asimbabbar, (namely) Sin [will rejoice with you],
 [When you] raise (your) head like an ox to the sheepfold,
 Dumuzi, the shepherd, [will rejoice with you]. . .

The one who in the marshes (and) rivers utters his sinister cry,
 My *agane* bird, will catch you, oh my fish.
 The one who in the waters where the nets are stretched, circles the nets
 (looking) for you,
 My *ubure* bird, will catch you, oh my fish.
 The one who (has) tall legs, the laughing one,
 Who comes from far away waters, writes in the mud,
 My *anše-bar* (?) bird, will catch you, oh my fish.
 The one who is not adorned,
 (Has) the [. . .] of a bird, the feet of a fish,
 My *kib* bird, will catch you, oh my fish.
 The one who seizes the quadru[peds] that wander into the marshes,
 My *kuda* crocodile will catch you, oh my fish.
 (But) you will not be seized by (their) claws, you will not be destroyed
 by (their) feet.
 Oh my [fish], time is pressing, come to me,
 [Time] is pressing, come to me.
 The queen of the fishermen,
 [Nanše], will be delighted with you.

b) Sumerian fish-list (after Kramer 1956; Civil 1961; Black et al. 2004: 243)

The fish who
 May all kinds of fishes also enter with you, oh my fish,
 The one who (has) nice ‘beards,’ eats the sweet plants,
 My *sulur-gal* fish, may he also enter with you, oh my fish;
 The one who eats the ‘inside’-reeds, to the mouth (?) [. . .],
 My *sulur-tur* fish, may he also enter with you, oh my fish;
 The one who (has) big lips, sucks the *gi-zi*-reeds,

. . . . [.]
 His food [. . . .]
 My *eštub*-fish, may he also enter with you, oh my fish;
 A black punting-pole, engendered in the fields,
 A farrowing sow, who in the river banks takes away the dough,
 My *gui-bi* fish, may he also enter with you, oh my fish;
 The one who (has) a spiny tail, a spiny back, goes out from the plants,
 My *še-sulhur-gal* fish, may he also enter with you, oh my fish;
 The fish who in his prayers (is) like a crying child,
 My *še-sulhur-gig* fish, may he also enter with you, oh my fish;
 The head is like a pickaxe, the teeth, a comb,
 His bones, the branches of a fir-tree;
 The skin of his bladder (?), the water-skin of Dumuzi;
 A 'de-haired' skin, which does not need processing;
 His slender tail like the fishermen's lines;
 A jumping fish, fish, the skin is naturally 'smoothed,'
 His entrails are not in his nose;
 A fish who seizes adversaries by arms and legs,
 Whose sting works like a nail;
 He is taboo, he is not placed as an offering in the city shrines,
 My *mur* fish, may he also enter with you, my fish.
 The fish whose fins churn the troubled waters,
 A fish who seizes with a glance (?),
 My *kiğ* fish, may he also [enter] with you, oh my fish.
 The head like a small millstone . . . a dog's head [. . .]
 A fish who does not eat the . [. .]-plants, . . [. .]
 My *gir-gid* fish, may he also [enter with] you, oh my fish.
 The noise of his entrails . . [. .]
 My *gir* fish, may he also enter with you, oh my fish.
 [The fish] who . . . a fish who knows how to escape the fences (of a fish-trap),
 A rebellious fish, who des[pite] being tasty, is an abomination,
 My *ab-sulhur* fish, may he also enter with you, oh my fish.
 The fish who makes breaches in dykes, with venom is placed in his jaw,
 My *agargar* fish, may he also enter with you, oh my fish.
 The merchants him,
 My *kamar* fish, may he also enter with you, oh my fish.
 The nomads fetch him away,
 My *nunbar-gid* fish, may he also enter with you, oh my fish.
 The fish who does not eat the edible plants, . . [. .],
 My *azagur* fish, may he also enter with you, oh my fish.
 The heavy skin . . [. . .],
 My *muš* fish, [may he also enter with you], oh my fish. . .

COMMENT: Given the centrality of the Euphrates and the Tigris to Mesopotamian life, fish were, naturally, important to the societies that flourished in the area – not simply in terms of being an abundant source of food and ritual offerings, but also as a potent cultural symbol. Fish enter into poetry, lyric and proverbs with regularity and in this particular Sumerian example the

poet speaks directly to the fish, sympathising with their daily plights as they negotiate the dangers of river life which include numerous wading-birds as well as crocodiles. The general Sumerian word for 'fish' was *ku(a)* and the Akkadian equivalent was *nūnu*. Several Akkadian fish terms are understood, including carp (*arsuppu*), swallow-fish (*sinūntu*), turbot or eel (*kuppi*), sturgeon (*singurru*) and sprat (*uruttu*).

There are several interpretations of the poem. Kramer (1956: 348) was under the belief that this is an address delivered by some unknown individual who was, for some reason or another, 'an ardent lover of fish'. He suggested that the text refers to the creation of an aquarium – perhaps even a royal collection of fish – which were provided for with a spacious pool and 'with fine food and drink, especially beer and sweet cookies'. Conversely, the 'aquarium' could actually be a fish trap: the fish are lured into baskets with the persuasive words of a fisherman who plies them with titbits.

However, Civil (1961) persuasively argued that 'the poem is a monologue by a deity, in all probability Nanše, the mother of fish (her ideogram actually reads "the house of fish")', who has 'built a new house for them, and invites all of them to come and spend the night there, where they will find a comfortable place of rest and will be safe and secure from all the animals which usually prey on them' (Civil 1961: 154). Woven into this is another strand: the naming of the fish, which can be compared with the Hebrew bible's motif of Adam naming all living creatures in the Garden of Eden (Genesis 1 and 2). The Sumerian language contains over a hundred words for 'fish', many of which can now be tentatively identified (Civil 1961; Salonen 1970). In the poetic text some sixteen fish are named, and the fish list contains even more, around a dozen of which can be identified.

3. Fish: a Hebrew vision of abundance

Hebrew bible, Ezekiel 47.6–11

Then he led me back to the bank of the river. When I arrived there, I saw a great number of trees on each side of the river. He said to me, 'This water flows toward the eastern region and goes down into the Arabah, where it enters the Dead Sea. When it empties into the sea, the salty water there becomes fresh. Swarms of living creatures will live wherever the river flows. There will be large numbers of fish, because this water flows there and makes the salt water fresh; so where the river flows everything will live. Fishermen will stand along the shore; from En Gedi to En Eglaim there will be places for spreading nets. The fish will be of many kinds—like the fish of the Mediterranean Sea. But the swamps and marshes will not become fresh; they will be left for salt. . . '

COMMENT: The Mediterranean Sea along the coast of Israel and Palestine was a poor fishery. The ancient Israelites often bought their fish from fish-merchants from Tyre who sold their wares in the markets of Jerusalem. The Sea of Galilee was rich in fish (mainly sardines), however, and this inland lake helped sustain the demand for fish which were approved of as legitimate for human consumption (Genesis 9.2–3, Leviticus 11.9–12 and Deuteronomy 14.9–10 permitted the eating of sea creatures if they had both scales and fins).

The prophet Ezekiel envisions an ecological miracle in which Yahweh will one day make the Dead Sea (a lifeless chemically laden lake) and the desert south of Jerusalem fruitful with two fast-flowing rivers (to parallel the Mesopotamian Tigris and Euphrates) which will fertilise the land and will swarm with fish – as many as are to be found in the sea. Ezekiel's vision is, in fact, one of several Scripture passages which focus on an extraordinary increase in the number of fish.

The gospel writers mention fish in a series of well-known miracle stories in which Jesus multiplies a small number of fish into enough to feed (at the highest count) five thousand people, or else hauls in a fishing net heavy with an unprecedented catch (John 6.9, 21.6; Matthew 15.34; Luke 5.6). These stories of abundance use the image of the fish to demonstrate Jesus' divinity; his promise that the disciples will be 'fishers of men' (Matthew 4.19) plays on that notion too.

4. Fish for Babylonian temple rituals

The Esagila Chronicle, cuneiform text from Sippar (after Millard 1997: 469)

In the reign of Puzur-Nirah, king of Akshak, the freshwater fishermen of Esagila [] were catching fish for the meal of the great lord Marduk; the officers of the king took away the fish. The fisherman was fishing when 7/8 days had passed [] in the house of Kubaba, the tavern-keeper, x x x they brought to [Esag]ila. (At that time [BROKEN] anew for Esagila x x x) Kubaba gave bread to the fisherman and gave water, she [made him offer] the fish to Esagila. Marduk, the king, prince of the Apsu, favoured her and said, 'Let it be so !' He entrusted to Kubaba, the tavern-keeper, sovereignty over the whole world. Ur-Zababa [ordered] Sargon, his cupbearer, to change the wine libations of Esagila. [. . .]

Naram-Sin destroyed the people of Babylon, so twice (Marduk) summoned the forces of Gutium against him. They [maltreated] his people with a goad. He (Marduk) gave his kingship to the Gutian force. The Gutians were unhappy people unaware how to revere the gods, ignorant of the right cultic practices. Utu-hegal, the fisherman, caught a fish at the edge of the sea for an offering. That fish should not be offered to another god until it had been offered to Marduk, but the Guti took the boiled fish from his hand before it was offered, so by his august command, he (Marduk) removed the Guti force from the rule of his land and gave (it) to Utu-hegal. Utu-hegal, the fisherman, carried out criminal acts against his (Marduk's) city, so the river carried off his corpse.

COMMENT: Fish were important as food (they were eaten raw, cooked, salted, dried, baked or preserved), not simply for the human population of Mesopotamia, but for the gods too. In Babylon all fishing rights theoretically belonged to the monarch or to temple personnel. Fishermen served the larger temples and were tasked with delivering set quotas of fish of varying species. Temple rituals specified whether the fish should be fresh, roasted, boiled or dried before being offered to the gods. In the temple sacrificial lists, practically every deity received *1 ha kesda (du)*, 'one basketful of fish', while some gods, like Inanna and Ninurta, received offerings entirely of fish in enormous quantities. Enki, Lord of Deep Waters, springs, rivers, streams and the Underworld waters, was also the recipient of special fish-sacrifices, for in excavations of the early levels at Eridu, chief site of his cult, 'great heaps of ashes were thickly intermingled with vast quantities of fish-bones, the remains of sacrifices constantly renewed on the same spot' (van Buren 1948: 103). The gods were served by fish-*apkallu* (spirits) and by the *kullullû*, a centaur-like fish-man, found on wall-panels in Assyrian palaces or with apotropaic function flanking the doorways of temples and palaces. Fish were also important, it would seem, as powerful symbols of the afterlife and of rebirth. In the Levant the goddess Atargatis was a fish-goddess whose cult flourished in Syria and whose influence spread into Phoenicia, Israel and beyond. Her sanctuaries at Hierapolis and Edessa and on Delos included a large carp pond; the fish symbolised Atargatis' life-giving fertility.

The Esagila Chronicle speaks about the blessings bestowed by the gods upon the pious early kings of Babylon who sacrificed to the great deity Marduk in the Esagila shrine in Babylon. The Chronicle relates in passing how fish offerings pleased Marduk, and how his anger was aroused by their misappropriation. The association between Marduk and fish may stem from the myth when the god defeated the daemonic Tiamat in combat, using the storm winds and an enormous fishing net as his weapons. Tiamat's corpse was split in two like a fish to be dried into two halves.

Fish sacrifices and offerings were still popular in the Neo-Assyrian and Neo-Babylonian periods: Sennacherib records in his Bavian Inscription that,

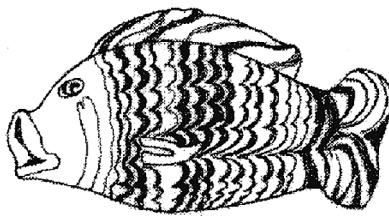
To dedicate that canal I sent . . . precious stones, a *bal-gi*-fish and a *sulhur*-fish, the likeness . . . of gold, herbs, choice oil, to Ea, lord of springs, fountains and the plain (?), (and) Enbilulu, lord of rivers, the lords who answer my prayers. . .

(van Buren 1948: 120)

The fish retained its sanctified quality even into the Achaemenid period where inscribed seals from Nippur (reign of Darius I or Artaxerxes I) attest to its chthonic importance. A fish finely crafted from gold was discovered as part of the Oxus treasure (Curtis 2012).

5. Tilapia fish

Line-drawing of an Egyptian glass vessel; from Amarna, XVIII Dynasty, reign of Akhenaten (London, British Museum EA55193)



COMMENT: This polychrome glass vessel in the form of a tilapia (or 'bulti'-) fish is one of the most beautiful of a small group of fish-shaped glass figures, all representing the tilapia, which was common in the Nile, and a standard feature of Egyptian New Kingdom decorative art. The blue, white, yellow and turquoise-blue wavy-lines which decorate the fish are not naturalistic, but they are very striking. This particular vessel was discovered in a private house at Amarna (Pendlebury 1951: 24 and pl. XII (3)). Fish-vessels were common in many media at this time (wood and ivory make-up boxes and cosmetic palettes were popularly crafted into fish-shapes) but how the glass examples were used is not clear; they were possibly ointment vessels and must have been supported by miniature stands, since they are incapable of standing up by themselves (Nolte 1968: 70).

The tilapia, very common in the Nile throughout Egypt, is easily recognised by its long dorsal fin. The fish has distinctive behaviour patterns and it hatches its eggs in its mouth (Beveridge and McAndrew 2000) and therefore became a symbol of regeneration and resurrection and was also associated with Re, the powerful solar deity, and followed his solar barque through the underworld.

6. Praise for the fish ponds at Pi-Ramesse

Papyrus Anastasi III, XIX Dynasty, reign of Merenptah

The residence is sweet of life. Its field is full of everything good. It is in food and sustenance every day, its fish-ponds in fish, its pools in birds, its gardens flooded with vegetation, the plants of 1 ½ cubits, the sweet melons like the taste of honey, with fields of loam. Its granaries are full of barley and emmer: they reach to the sky. There are hills of onions and leeks, groves of lettuce, pomegranates, apples, and olives, orchards of figs, sweet wine of Kankemet, surpassing honey. There are redfish of the canal of the Residence, that live on lotuses, *b^d-i* fish of the riverway, various *bⁱr-γ* fish and *b3-g3* fish, [. . .]-fish of the *pw-h3-ir-ti* mullet of the waterway [. . .] of Baal, *h3-w3-l3-n3* fish of the mouth of the waterway 'Fig-tree of Great of Force.' The Lake of Horus has salt, the Canal has natron. Its ships set out and dock, and the food of sustenance is in it every day . . . To it come the papyrus-marshes with rushes and the Lake of Horus with reeds: shoots of the orchards, wreaths of the vineyards. To it comes the bird from the cataracts, that it might rest on it; [. . .] the sea with *b3-g3* fish and mullets. To it do their farthest regions direct offerings.

COMMENT: Papyrus Anastasi III, which is dated to the third regnal year of Merneptah (c. 1213–1204 BCE), includes an evocative evocation of the beauty of the garden of pharaoh's place at the Delta city of Pi-Ramesse. Evidence for the existence of lakes and canals to feed gardens is plentiful from the New Kingdom (Wilkinson 1991). Temples also had lakes full of fish and fowl, not so much for simple aesthetics but for ritual purposes – the sacred lakes symbolised the waters of creation and the fish which inhabited the depths were reminders of the regeneration of souls (see FISH no. 5). The close ideological connection that existed between temples and royal residences means that palatial gardens were probably rich in symbolism too.

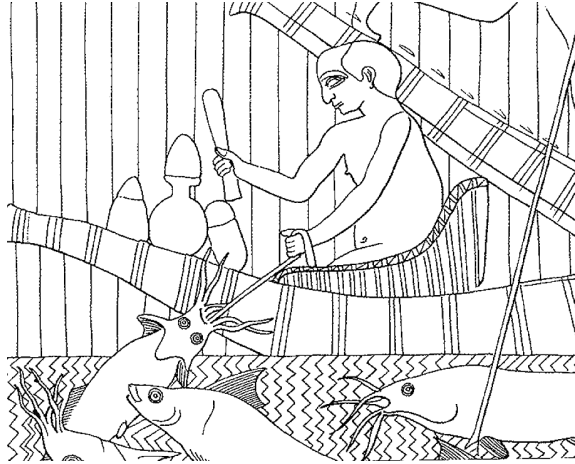
The Egyptian elite kept ponds full of fish in the gardens of their palaces and villas and enjoyed the gentlemanly arts of fishing, both at home (see BUTTERFLY no. 1) and in the marshes (Parkinson 2008: 128). A fragmentary XVIII Dynasty copy of a Middle Kingdom text on the elite pleasures of hunting makes the enjoyment of a fishing trip very clear:

I sit down in a clearing. I prepare for myself a shelter, after I have fastened my bait. I am in the cool; my fish are in the sun. I can see whatever is in my field of view, (but) it cannot see me. The fish is before the spear. I kill again and again, there being no end for my (harpoon) shaft. I shall fill bags with white Nile perch (but) the gutting (of fish) is not agreeable to me.

The small golden shrine of Tutankhamun represents the king hunting fish with a bow and arrow (Wilkinson 1991: 51).

7. The catfish

Detail of a line drawing from the tomb of Ti at Saqqara, V Dynasty



COMMENT: The electric catfish (*Malapterurus electricus*), with its huge bulky body and odd tentacled appearance, was depicted in Egyptian art from around 3000 BCE – first as a hieroglyph for the name of King Narmer, ‘catfish’. The catfish is frequently depicted in tomb art throughout the pharaonic period where it is shown to be one of the Nile’s most ferocious predators – when attacked, the electric catfish can discharge around 450 volts upon its enemy, as many Nile fishermen must have experienced. A VI Dynasty painting found in a tomb at Dashur shows cattle being herded across the Nile and depicts a young calf which has been killed not by a crocodile attack, but by catfish electrocution.

The electric catfish is mentioned in a series of New Kingdom medical papyri as therapeutic ingredients for various ailments including an infliction known by the Egyptians as ‘half a head’ – a migraine. Papyrus Ebers 250 has recently been re-translated to demonstrate that, as a form of migraine relief, the ‘head of the (species) of electric catfish which causes frying’ should be placed onto the forehead of the afflicted individual (Park 2010).

8. The science of fish

Aristotle Historia Animalium 504b13–505b5

Among animals which live in the water, fish form a distinct group separate from other water creatures, although they differ among themselves in appearance. All fish have a head and dorsal and ventral surfaces, the latter containing the belly and the intestines. Behind they have a continuous undivided tail, but the form is not the same in all fish. They do not have a neck, or limbs or testicles, either internal or external, nor do they have breasts. [...] As I have said, fish do not have breasts, nor any visible birth canal. Characteristic of fish, however, are gills, through which they expel water, having taken it in through the mouth, and fins, of which most fish have four, though some long fish such as eels have only two, near the gills. Likewise the grey mullet, such as those found in the lake at Siphæe, have two fins, and also the so-called ribbon-fish. And some long fish have no fins at all, such as the moray, nor are their gills as developed as those of other fish.

All fish have gills, but some have a covering over them, while the cartilaginous fish all have uncovered gills. Those fish with covered gills have them on their sides, whereas among cartilaginous fish the flat fishes have gills underneath on their ventral side, like the electric ray and skate, and the longer fishes have them on the sides, like the dogfish. The angler-fish, although it has gills on its sides, has coverings of skin, not spiny covers like other bony fish.

Some fish have gills that are single, others double; but the last gill towards the body is always single. Again, some fish have few gills and others many, but all have the same number on each side. Some have just one gill on each side, a double one, like the *kapros*; some have two on each side, one single and one double, like the conger and the parrot-wrasse; some have four single gills on each side, such as the gilt-head, *synagris*, moray and eel; and yet others have two rows of four gills (apart from the last), like the wrasse and perch and sheat-fish and carp. Dogfish have five double gills on each side, and the swordfish eight.

Fish have other characteristics which set them apart from other animals as well as gills; unlike viviparous quadrupeds they do not possess hair, nor horny scales like oviparous land animals, nor do they have feathers like birds; most fish have smooth scales, though a few are rough-skinned and one or two have smooth skin. Among the cartilaginous fish some are rough-skinned and some smooth; also smooth are congers, eels and tunny.

Theophrastus, On Fish 2–3, 7–10

In the region of Babylon there are fish which are said to live in holes in the mud after the river has dried up, and these come out onto the mud to feed, walking on their fins and through movements of their tails; when they are pursued they flee back to their holes and stand there looking out, for people often approach and disturb them. Their head is like that of an angler-fish and their body like a goby with a normal fish's tail. They do not have feet but walk on their fins which are very large; many of them are caught by their hunters. It is not strange that they should feed on land, for some fish which live in water feed on mud and seaweed and the like, and since they come out into the air their feeding thus is logical, since the octopus and moray and other fish also come out of the sea to feed, so it is said.

Fish which are dug out of the ground, which are found around Heracleia and in other places near the Black Sea, are found beside rivers and in watery places. What happens is that the water dries up and the fish are left behind, so they curl up and follow the moisture by burrowing into the earth, and when it has completely dried up they remain in the earth, preserved as though by salting, like creatures which hibernate in a den. But if they are dug up they move. A similar case is those fish which are frozen in the Black Sea when they are caught in the ice: they have to be put in a pan and boiled before they show signs of life and movement. This seems to happen most often to gobies.

As a general rule buried fish occur because rivers which have overflowed their banks, when they retreat to their original channel, leave behind in the places which have dried up either eggs or the generating matter from which fish are born – for some fish, like the eel, are spontaneously generated, and the same seems to be true of the *kestriniskos* – and this is what seems to happen in Heracleia around the river Lycus: as the eggs are deposited there, the fish develop and remain there. And it is not unusual that the fish should remain the ground, for many animals of this kind can survive on little nourishment, such as snakes and creatures in hibernation. The fish find sufficient food first of all in the egg, and afterwards from the moisture of the ground. But as one would expect, they do not grow to a great size, since they lack both space and a plentiful supply of food, both of which are necessary for growth.

COMMENT: The studies of the Peripatetic school underlie all other classical discussions of fish, and Aristotle demonstrates a sound understanding of their distinctive features. After a preliminary division of animals into land- and sea-creatures, Aristotle distinguishes different groups of marine animals including testaceans (shellfish), crustaceans, cephalopods and fish (*HA* 490b 6–14), also noting that some creatures which behave like fish, such as dolphins and porpoises, are in fact mammals (489b 1–2). He distinguishes cartilaginous fish (including rays and sharks) from bony ones (489b 6–7), and understands that all fish breathe water through their gills. His *Historia Animalium* also includes discussion of fish diet (591a 7–592a 27), migrations (597b 30–599a 3), hibernation (599b 2–600a 10) and reproduction (567a 17–569a 9), most of which is very accurate apart from the last, where the difficulty of observation meant that while some forms of mating and egg-laying among larger fish were known, other fish such as eels were considered to arise by spontaneous generation (569a 10–570a 24). Aristotle's material was drawn primarily from observation, most likely in the shallow waters of the lagoon at Pyrrha on Lesbos which he mentions several times; his account tends to centre on the fish of the north-east Aegean where he and his school settled in the 340s (Lee 1985).

Theophrastus, Aristotle's successor, in his short treatise perhaps entitled *On Fish Which Spend Time on Dry Land* (Sharples 1992: 348) attempts to make sense of the stories from Babylon and the Black Sea which attested to fish found on land or underground. The walking fish of Babylon appear to be mud-skipper (*oxudercinae*), accurately described; they are able to breathe air for short periods. The fish found underground, however, are not so easily identified, but the passage shows Theophrastus' attempt to account for their existence by reason: he states that they are water-breathing like all fish, and survive due to the moisture of the ground.

9. Different species of fish

Campanian fish-plate, New York Metropolitan Museum of Art 06.1021.241, attr. Heligoland Painter, 325–300 BCE (Rogers Fund, 1906). Photograph courtesy of The Metropolitan Museum of Art (www.metmuseum.org)



COMMENT: The fish-plate is an unusual and characteristic form of pottery which developed in Athens at the end of the fifth century and became very popular with South Italian artists in the fourth: a thick plate with a central depression is decorated with three fish or other marine animals such as octopus, cuttlefish and sometimes shellfish. The example here includes three large fish, two bream and one electric ray, with shellfish in the background: two cockles, another shell identified as a mussel, a murex (see MUREX) and a very whiskery prawn. The fish illustrated by South Italian artists are not generic, but closely observed individual species: hundreds of fish-plates are known (catalogued by Trendall and McPhee 1987 and 1990) and they provide a detailed catalogue of the species of edible sea fish recognised in classical Greece. It is generally suggested that the form of the plate reflected its function, i.e. that they were used for serving fish, the central well holding an appropriate sauce, but large numbers have been found in funerary or sacred contexts, perhaps as a form of offering to accompany the deceased into the afterlife.

In the number of species shown and the accuracy of their depiction, fishplates have much in common with the Roman 'fish catalogue' mosaics which were so popular in the first and second centuries CE (Reese 2001: figs 226–9; Meyboom 1977). Fish mosaics are found across the Roman empire, as decorations for fountains or in domestic settings: they depict large numbers of minutely detailed fish and other marine creatures (see TAXONOMIES no. 4, OCTOPUS, CRAB), usually those local to the specific area where the mosaic was found, attesting to far better knowledge and interest than today.

10. Roman aquaculture

Columella De re rustica VIII.16.10–15

Now is the time to discuss how fishponds should be situated. In my view the best site for a fishpond is one where the intruding waves of the sea expel the older water, since this means that the pond can never become stagnant. This kind of pond gives conditions most like those in the sea, where the movement of the winds constantly renews the water and does not allow it to become warm: cold water regularly wells up from below the surface. Such a pond can either be cut out of the rocks, though this is less usual, or built from waterproof mortar on the shore. But however it is constructed, if it is always cooled by the incoming tide, it should include recesses near the bottom, some of them simple square holes, in which the fish can hide away, and others curled in a spiral and fairly narrow, where morays can lurk; although many people advise against keeping morays together with other kinds of fish, because if they are seized with madness as often happens with this species, just like dogs, they will chase the other fish and devour great numbers of them.

[In ponds which are not open to the tide] recesses or cells should be cut into the walls in which the fish can hide from the sun's heat and which at the same time allow the water to flow in and out easily. And one should be sure that bronze gratings with small openings are placed over the channels through which the water flows to prevent the fish escaping. If there is space it is a good idea to place rocks from the shore in the pond, particularly those which are covered in seaweed, to give the appearance of a marine environment as far as can be achieved, so as to make the fish feel their captivity less.

Once the enclosures have been prepared in this way, we shall introduce our scaly flocks to the pond, and just as with farming on land, the same principle applies to water: suit the produce to the place. It is not possible, for instance, to raise a great shoal of red

mullet as are often seen at sea in a pond, because they are a very delicate species and do badly in captivity: only very rare red mullets can bear to be enclosed; on the other hand sea-fish such as the sluggish grey mullet and fierce sea bass are often at home in ponds. Thus one should consider the nature of the seashore, and if it is rocky, so much the better: we can include several kinds of wrasses and greedy hake, and bass without spots (for there are different kinds), and floating morays, which are held in great esteem, and any other rock-dwelling morays which are valued; for cheap fish are not worth either catching or keeping. These species can also be kept successfully in ponds on a sandy shore, but shores which are muddy, as noted above, are more suitable for shellfish and flatfish.

A pond for flatfish should not be positioned as above, nor do flatfish eat the same food as round fish. For soles, turbot and similar kinds of fish a shallow pond two feet deep should be made on a part of the shore which is never left uncovered by the tide. Close-woven barriers should be fixed around the edges, standing high above the water-level even at high tide; then the pond is surrounded by dams, rising higher than the sides. Thus the sea's violence is broken by the banks, and the fish, always in calm water, are not disturbed from their territory, nor does the pond itself become filled with bunches of seaweed thrown up by the sea in stormy weather. But at several points small winding channels should be cut into the dams, through which the seawater can enter the pond without causing a wave, even in a winter storm.

Food for flatfish should be softer than for rockfish, because they lack teeth and either lick up their food or swallow it whole, since they cannot chew it. Thus suitable food is decaying shad, over-salted pilchards or rotting sardine, the gills of parrot-wrasse or the guts of *pelamys* or scad; also of mackerel, dogfish and tunny, or (not to list them at length) sweepings of any salt fish from the fishmonger. . . . This diet of salt fish is the most suitable for them because it is very smelly: flatfish find their food by scent rather than by sight. Because a flatfish is always lying down its gaze is upwards and it cannot easily see what is to the left or right of it. And so when salt fish is thrown to it, it follows the scent and thus finds its food.

Rock- and sea-fish can also be fed successfully on this diet, but are better on a diet of fresh fish: freshly-caught shad, prawns, small gobies or any small fish provide food for the larger ones. If winter storms make it impossible to give them this kind of food, then they can be given pellets of coarse bread or whatever fruits are in season. In regions such as Baetica and Numidia where figs are abundant, dried ones are always given. But it is a mistake to do as many owners and fail to feed the fish at all, in the belief that fish can survive for a long time even when they are enclosed; because unless the fish are fattened by food from their owner, when they come to the fishmarket their lack of flesh shows that they have not been caught at sea, but raised in captivity, and thus they reach a far lower price.

COMMENT: While fishponds and enclosures for fish were common throughout Mediterranean history, it was the Romans in the first century BCE who developed fish-farming in an intensive form, creating elaborate ponds in which sea-fish could be raised. Varro (*DRR* III.17.2) comments that freshwater ponds are for ordinary people and marine ponds for the rich, undoubtedly because a freshwater pond can be easily constructed and fed from a lake or stream, whereas a pond for marine fish requires a complex design to allow the water to circulate. In this extract Columella details both the complexities of construction of ponds for different species of fish, and the extravagance involved in catching smaller fish to feed to prized fish in the pond. These extremes came about for two reasons: the importance attached to fish as a luxury food, and conspicuous

consumption at the villas of the aristocracy. Columella implies that the fish would be raised for profit, and Marzano (2013: 217) suggests that the scale of some ponds at Italian sites does imply commercial production, but other literary sources dwell on the rich man supplying only his own table. For the status of these fish as pets, see below no. 12.

11. The intelligence of fish

Oppian Halieutica III.92–115

Fish not only use wily intelligence and deceitful cunning against each other, but often succeed in outwitting the experienced fisherman, escaping from the hook and hollow net even at the point of capture, defeating men in the contest of wits and causing grief to the fisherman. The grey mullet, for example, when caught in the woven net, realises that he is being encircled and leaps high to the water's surface, hurling himself upward with all his might, and his clever plan is not in vain, for often he leaps over the corks on the net's edge and escapes his doom. But if his first leap fails and he falls back into the net, he ceases his efforts and tries no more, learning from failure, too grieved to leap. . . . When morays are caught in an encircling net they wind themselves about looking for a hole in the meshes through which they may glide like a snake and escape thanks to their slippery form.

The sea-bass digs a hole in the sand using its fins, large enough to contain it, and lies down as though in a bed; the fishermen may bring their nets down to the shore, but the bass lies happily in the mud to avoid being caught and escapes the lethal snare. The *mormuros* has a similar trick: when it realises that it is caught in a net it buries itself in the sand.

The *labrax* also, when caught on the crooked hook, throws its body upwards and thrashes its head against the line until it widens the wound and so slips off the hook. The mighty tunnies too practice the same wile: if they are hooked on the deceptive barb they immediately haul on the line and race to the sea's depths, straining the hand of the fisherman and once they reach the bottom they beat their head against the sea bed to open the wound so that they can spit out the hook.

Oppian Halieutica IV.40–64

Observe the keen concern and fellow-feeling which the spotted parrot-wrasse shows: when in trouble they do not abandon each other to their fate, but often, when one has been caught with the deadly barb, another parrot-wrasse hastens to his defence in a spirit of helpfulness and bites through the line to save his companion, destroying the snare and thwarting the fisherman. Again, if a parrot-wrasse has been caught in the woven fish-trap, another of its kind has been known to rescue it and save it from death; for when the spotted fish is lured into the trap, immediately it recognises what has happened and tries to escape its miserable fate, turning its head and eyes downwards and swimming backwards to try to get out again – it fears the sharpened rushes which bristle around the entrance like guards, and wound its eyes if it approaches head-on. The other parrot-wrasse, seeing their friend turning about in despair, comes from outside to its assistance and do not abandon it in its travails: one slides its tail through the side of the trap for its companion to take hold of, the trapped fish grasps it with its teeth and the other pulls it out of the trap with its tail in its mouth. Or sometimes the wrasse

caught in the trap sticks its own tail out of the trap, and another takes hold of it and pulls it out through the entry.

COMMENT: Oppian's *Halieutica* is a didactic work on fish and fishing, a companion to the *Cynegetica*, written in the late second century CE. Oppian first discusses different kinds of fish and other marine animals in two books, then describes different methods of fishing in a further three books. He does not, however, present fish simply as prey – he is part of a tradition which credits them with intelligence and cunning, not only in resistance to human fishers, but in their hunting and behaviour too. The examples here describe the efforts of fish to escape from net, line or trap as purposeful and reasoning, not simply as reflex actions, in a way that parallels ideas about land animals. A similar attitude is found in Plutarch's fragmentary *On the Intelligence of Animals*, which is structured as a debate over whether land or sea animals are more intelligent, and whose section on marine animals shares much material with Oppian. Both authors credit fish with concern for their young (Plut. *Mor.* 982A; Opp. *Hal.* I.734–55) and guile in hunting other animals, including humans in some cases (*Mor.* 978B–D; *Hal.* II.86–166); to some extent their aim is to make fishing seem a more heroic activity, equivalent to hunting on land, but it also demonstrates that ancient writers saw less difference between sea and land animals than we might expect.

12. Fish as pets

Aelian On the Nature of Animals VIII.4 (i)

Even fishes can become tame and tractable, and can learn to come when they are called and take food from their master's hand, just like the eel in the sacred spring of Arethusa. They tell, for instance, of the moray which belonged to the Roman Crassus, which was decked out with earrings and little jewelled necklaces like a beautiful maiden; it recognised Crassus' voice when he called it and would swim up to him and readily take whatever food he offered it. And when it died, the story goes, Crassus mourned it excessively and had it buried. And when the emperor Domitian called him a fool for mourning a dead moray, Crassus answered him, 'Yes, I am grieving for a fish, while you have buried three wives without mourning them at all.'

COMMENT: The keeping of pet fish was, as Aelian notes, a Roman phenomenon: as well as Crassus cited here, Pliny (*NH* IX.172) similarly refers to Hortensius who also had a favourite moray which he mourned when it died, and which was also supposed to have been given earrings (presumably decorating its pectoral fins, as eels have no ears (Higginbotham 1997: 250 n.17)). Mulletts, too, are said to have been favoured as pets: Cicero refers disparagingly to 'fish-fanciers' among the senators whose pet mulletts will swim up to be stroked and fed when called (*Ad Att.* II.1.7). The idea that fish might come to know their owner and swim up to be fed is often claimed by Roman writers (see also Martial *Ep.* X.22–4), and it is realistic: large fish such as carp are able to recognise an owner and come to be fed. But when Pliny claims (*NH* X.193) that in the Emperor's aquarium individual fish could recognise their names, this is less likely: the fish were probably simply responding to familiar actions by their keepers. Despite the many stories of individual Romans who were devoted to their fish, however, one may wonder how much of this was merely posturing among the rich: the primary purpose of fish-keeping was to supply fish for the table, and while Hortensius is supposed to have refused to allow any of his mulletts to be eaten (Varro *DRR* III.17.5), it is not clear that this was the case anywhere else. Keeping sea-fish in aquaria was an expensive and high-status hobby, and the celebration of the individual

fish perhaps owed more to ostentation than to a personal relationship as with other kinds of pet.

The other famous moray-keeper of Roman antiquity was of course Vedius Pollio, who was notorious for throwing his slaves into his moray-pool 'so as to see them torn to pieces' (*NH* IX.77). This story of Pollio's extreme cruelty has proved enormously popular in the public mind, but is unfortunately fanciful: morays, much like the similarly maligned piranha, do not attack grown men and tear them to shreds: they feed on small fish, cephalopods and crustaceans, and an able-bodied slave would easily manage to deter them. One can only suppose that if Vedius Pollio did feed his slaves to his morays, he cut their throats first.

13. Tuna-fishing in the Bosphorus

Philostratus Imagines I.13

We will not concern ourselves with trivial topics but only those worthy of note, so I will pass over those who fish with a rod or make a trap from a basket, or who haul nets or hunt with a trident, for there is little to say about these and they will seem to you simply embellishments to the picture; but let us look at those who hunt the tunny, as the scale of their hunt makes the tale worth telling. The tunny come out into the [Mediterranean] Sea from the Black Sea, where they are born and grow fat on fish, and the sediment and plants which the rivers Ister and Maeotis carry into the sea; these rivers make the waters of the Black Sea sweeter and more drinkable than those of any other sea. The tunny swim in formation, like a phalanx of soldiers, in rows of eight or sixteen or thirty-two, and they swim below the waves, one under another, to a depth as great as the school is wide. There are many different methods of catching them – they can be speared with sharp iron or poisoned, or caught with a small net, if the fisherman is content with but a small catch from the school – but the best mode of hunting is this: a lookout stationed on a tall wooden platform, a man good at tallying numbers and keen-sighted, casts his eyes here and there over the sea, and when he sees the tunny swimming near he shouts aloud to the men in the boat, giving the size of the school in their thousands. And the fishermen, drawing in a deep and fine-meshed net, make an impressive haul, enough to make the captain rich.

Now look at the painting and you will see the hunt in action: the lookout gazes out to sea, scanning to reckon the number of tunny, and in the grey sea the colours of the fish shine out, those at the surface dark against the water, those below paler, and those below them again beginning to fade from view, becoming shadowy and then mingling with the sea, for clarity of vision lessens as one looks deeper into the water. How pleasing to the eye are the fishermen, bronzed by the sun; one is settling his oar, another rows with straining arms, a third encourages his shipmate, while a fourth strikes a lazy rower. The fishermen shout as the fish stream into the net, wave upon wave. And, amazed at the size of the catch, in delight at their successful hunt they even open the net and allow some of the fish to escape and swim away.

COMMENT: Philostratus' *Imagines* are an example of the *ekphrasis* genre, descriptions of a series of paintings, written in the third century CE. This extract describes a painting of the Bosphorus, including one of the characteristic activities of the region, tuna-fishing. Tuna was one of the most favoured fish in antiquity, both for its rich fatty meat and its size, and a large-scale tuna-fishing industry grew up along its migratory routes to and from the Black Sea: according to

Strabo the shores of Propontis were covered in tuna fisheries (*Geog.* XII.3.11). Ancient methods and organisation of tuna-fishing are extensively discussed by Marzano (2013: 66–79), but this short description encapsulates the essence of the hunt: the lookout on his tower was key, and inscriptions show us that tuna lookout towers were frequent along the coasts, sometimes publicly owned and leased out by the state; Marzano (2013: 76–7 and fig. 12) also illustrates archaeological evidence for a wooden lookout platform of the kind described by Aelian (XV.5). The size of school described here is large but not fanciful, and because tuna commanded such high process, a single lucky haul could indeed enrich not just an individual but a community: the city of Corcyra dedicated a bronze bull to Apollo at Delphi in thanks for a miraculous catch of tuna (Pausan. X.9.3–4). Once caught, the glut of fish was usually preserved by salting, and fish-salting factories are found along the same migratory routes in Spain, Portugal, Morocco, Tunisia, Sicily, Brittany and the Black Sea. Salt fish was a staple of the ancient diet and the well-known Roman fish sauce, *garum*, made from fermented fish guts, was a by-product (Curtis 1991).

14. The fish of the River Moselle

Ausonius, Mosella (Idylls 10) 82–149

Naiad, who dwells on the riverbanks, show me the scaly flocks and describe the fishes which swim in the clear bed of the blue waters. The scaly Chub shines among the sand and weeds, its tender flesh densely packed with bones; quick to spoil, it keeps only six hours for the table. The Trout, its back starred with purple spots, the Roach with no harmful spine, and the nimble Grayling whose rapid pace hides it from sight; and you, Barbel, tossed in the narrow mouth of the crooked Sarre, where six streams froth around the stony pillars, when you slip out into the waters of the more famous Moselle, you are free to swim and range. You are better tasting in old age; alone among creatures, your later years are praised. Nor shall I pass over you, Salmon, with your gleaming scarlet flesh; the wandering sweeps of your broad tail midstream make waves on the surface of the waters, and your hidden strokes are seen on the still surface. Your breast is armoured with scales, but your head is smooth; you make a suitable centrepiece for a generous dinner, and bear a long delay without spoiling. Your head marked with distinctive spots, your belly quivers with the weight of your fatty sides. And you, Eel-pout, who are caught in Illyria in the waters of the two-named Ister, recognised by the foam of your passage, you also pass into our sea, so that the broad waters of the Moselle should not lack so famous a guest. With what colours has Nature painted you! Your back is scattered with black spots surrounded by a yellow circle, your slippery body is dyed dark blue, dense with fat up to the middle, then dry and rough to the end of your tail. Nor will I neglect to mention you, Perch, delight of our tables, born of the river but worthy of sea fishes, worthy alone to compare with the red mullet. Delicious to taste, your body is divided into compact sections separated by bones. Here too the Pike, with its amusing Latin name [= *Lucius*], lurker in ponds, inveterate enemy of the croaking frogs, seeks out a murky lair among the weeds and mud. An unattractive fish for our dinners, it will seethe in the cookshops in a cloud of noxious steam. Who does not know the green Tench, food of the commoner, and the Bleak, prey of little boys with their hooks, or the Shad which hisses on the fire, relish for the *plebs*? And you, Salmon-Trout, between two species, both and neither, not yet a salmon, but no longer a trout, double in character and caught in middle age. You also should be mentioned among the river's army, Gudgeon, no more than two hands in length, fat and smooth, and bigger when your belly is heavy

with eggs; your dangling whiskers imitate those of the Barbel. Now, great Sheat-fish, I shall praise you, creature of the sea, your back smooth as with Attic oil; I count you the dolphin of the river as you glide grandly through the waves and wind your long body slowly among the shallows and the sedge. But when you make your stately course along the stream, the leafy banks, the blue crowd of fishes and the clear waters wonder at you; the waves surge and lap at the river's edge, just as sometimes the Whale in the deep Atlantic is driven by wind of by its own movement to the shore, the sea is pushed aside and great waves rise up, dwarfing the surrounding mountains. But this, the gentle whale of our Moselle, is no danger, but rather an honour to this great river.

COMMENT: It is unusual to find river-fish praised in an ancient text: in general they were considered to be far inferior to sea-fish, but here Ausonius gives each a heroic description. His poem in praise of the Moselle, written in honour of the emperor Valentinian's victory against the Alamanni in 368 CE, describes the river, its environs and the activities which take place in and around it, and was hugely celebrated in antiquity. This section treats the fish of the Moselle, drawing its origins from the tradition of catalogue literature, and gastronomic works (Hunink 2001). While it demonstrates a detailed knowledge of freshwater fish species, their appearance and their behaviour, Ausonius' friend Symmachus teased him in a letter (I.14) about all the different fish he claimed to have seen in the Moselle, saying that he himself had never managed to catch or eat such fish, and the catalogue is probably more a literary showpiece than a description of reality.

Bibliography

- M.C.M. Beveridge and B. McAndrew, *Tilapias: biology and exploitation* (Dordrecht 2000).
 J. Black, G. Cunningham, E. Robson and G. Zólyomi, *The Literature of Ancient Sumer* (Oxford 2004).
 D. Brewer, D. Friedman and R. Friedman, *Fish and Fishing in Ancient Egypt* (Warminster 1989).
 M. Civil, 'The Home of the Fish. A new Sumerian literary composition', *Iraq* 23.2 (1961), 154–75.
 J. Curtis, *The Oxus Treasure* (London 2012).
 R. I. Curtis, *Garum and Salsamenta: production and commerce in material medica* (Leiden and New York 1991).
 E. Danelius and H. Steinitz, 'The fishes and other aquatic animals on the Punt-reliefs at Deir el-Bahri', *Journal of Egyptian Archaeology* 53 (1967), 15–24.
 R. O. Faulkner, 'Debate between a man tired of life and his soul', in W.K. Simpson (ed.), *The Literature of Ancient Egypt* (New Haven and London 1973), 201–9.
 J.A. Higginbotham, *Piscinae: artificial fishponds in Roman Italy* (Chapel Hill 1997).
 V. Hunink, 'The fish catalogue in Ausonius' *Mosella*: literary backgrounds of *Mos.* 75–149', in A.P. Orbán and M.G.M. van der Poel (eds), *Ad litteras. Latin Studies in Honour of J.H. Brouwers* (Nijmegen 2001), 163–76.
 S.N. Kramer, *History Begins at Sumer* (Philadelphia 1956).
 H.D.P. Lee, 'The fishes of Lesbos again', in A. Gotthelf (ed.), *Aristotle on Nature and Living Things: philosophical and historical studies presented to David M. Balme on his seventieth birthday* (Bristol 1985), 3–8.
 A. Marzano, *Harvesting the Sea: the exploitation of marine resources in the Roman Mediterranean* (Oxford 2013).
 A. McFarlane and A.-L. Mourad, *Behind the Scenes. Daily Life in Old Kingdom Egypt* (Oxford 2012).
 P.G.P. Meyboom, 'I mosaici pompeiani con figure di pesci', *MNIR* 39 (1977), 49–93.
 A. Millard, 'The Weidner Chronicle', in W.W. Hallo (ed.), *The Context of Scripture I: canonical compositions from the biblical world* (Leiden 1997), 468–70.
 B. Nolte, *Die Glasgefäße in Alten Ägypten* (Berlin 1968).
 R. Park, 'King Narmer's electric catfish', *Ancient Egypt* 11.1 (2010), 34–9.
 R. Parkinson, *The Painted Tomb-Chapel of Nebamun: masterpieces of ancient Egyptian art in the British Museum* (London 2008).
 J.D.S. Pendlebury, *The City of Akhenaten, Part I. The Central City and the Official Quarters. The Excavations at Tell el-Armana During the Seasons 1926–1927 and 1931–1936* (London 1951).
 N. Purcell, 'Eating fish: the paradoxes of seafood', in J. Wilkins, D. Harvey and M. Dobson (eds), *Food in Antiquity* (Exeter 1995), 132–49.

- D.S. Reese, 'Fish: evidence from specimens, mosaics, wall paintings and Roman authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 274–91.
- H. Ringgren, 'dāgh', in C. Johannes Botterweck and H. Ringgren (eds), *Theological Dictionary of the Old Testament III* (Grand Rapids 1978), 132–9.
- A. Salonen, *Die Fischerei in Alten Mesopotamien* (Helsinki 1970).
- R.W. Sharples, 'Theophrastus: *On Fish*', in W.W. Fortenbaugh and D. Gutas (eds), *Theophrastus: his psychological, doxographical and scientific writings* (Rutgers University Studies in Classical Humanities V) (New Brunswick and London 1992), 347–85.
- D.W. Thompson, *A Glossary of Greek Fishes* (London 1947).
- A.D. Trendall and I. McPhee, *Greek Red-Figured Fish-plates* (Basel 1987).
- A.D. Trendall and I. McPhee, 'Addenda to *Greek red-figured fish-plates*', *Antike Kunst* 33 (1990), 31–51.
- E. D. van Buren, 'Fish-offerings in ancient Mesopotamia', *Iraq* 10.2 (1948), 101–21.
- H.L.J. Vanstiphout, 'Lore, learning and levity in the Sumerian Disputations: a matter of form, or substance?', in G. Reinink, G. and H.L.J. Vanstiphout (eds), *Dispute Poems and Dialogues in the Ancient and Medieval Near East* (Leuven 1991), 23–46.
- H.L.J. Vanstiphout, 'Sumerian canonical compositions', in W.W. Hallo (ed.), *The Context of Scripture I: canonical compositions from the biblical world* (Leiden 1997), 575–88.
- A. Wilkinson, *The Garden in Ancient Egypt* (London 1991).

SHARK

To the modern imagination 'shark' conjures up images of the large predator which attacks humans, but Mediterranean sharks are in fact a large and various group of fish, ranging from the small (dogfish and monkfish) to the large (porbeagle and thresher shark). About fifty species inhabit the Mediterranean and many were more numerous in ancient times before the impact of intensive fishing. The generic name in Greek for sharks, *kuōnes*, means 'dogs of the sea', so called because they are carnivores which hunt in packs. Finding parallels between ancient names and modern species is always problematic, but writers such as Oppian distinguish three kinds of *kuōnes*: the large man-eating type, including the *zugaina* (hammerhead shark), the *galeotes* (spotted dogfish) and the *kentrinas* (spiny dogfish) (*Hal.* I.373–82). Many individual species are identifiable in Roman fish mosaics (Reese 2001: 287–8 and figs 226–9), the most numerous being spotted dogfish.

Ancient scientists recognised the cartilaginous fish as a distinct class, distinguishing sharks from rays, and they describe their distinctive reproductive habits, some laying eggs in cases and others producing live young (Ar. *HA* 540b 15–28, 565a 12–566b 2, 516b 36–17a 3, 489a35–b7; Plin. *NH* IX.78). While they were not regularly fished, shark parts were valued: Pliny says that shark skin was used to polish wood and ivory (*NH* IX.40, XXXII.108), and sharks' teeth were carried as amulets, though in many cases these were fossilised teeth (Reese 1984: 190–1).

1. A shark attack

Plutarch Phocion 28.1–3

The [Macedonian] garrison was installed on the 20th of the month Boedromion, during the celebration of the Mysteries, on the day when the image of Iacchos is carried from the city to Eleusis; the disturbance caused to the ritual made most people consider how the gods had favoured them in the past, and the difference now. . . . As one of the initiates was washing his sacrificial piglet in the harbour at Cantharos, he was seized by a shark, which swallowed the lower half of his body, as far as the belly, an omen which

plainly indicated that Athens would lose the lower part of the city, nearest the sea, but would retain the Acropolis.

COMMENT: The word used by Plutarch in this passage is *kētos*, literally a sea-monster, but his tale of a shark attack in the main harbour of the Piraeus bears the marks of verisimilitude: the Mediterranean is home to several species of shark which will attack humans, including the Blue Shark (*Prionace glauca*) and the Hammerhead (*Sphyrna zugaena*). The ritual of the Eleusinian Mysteries included the mass purification of the initiates and their sacrificial piglets in the sea, and it is all too likely that the splashing, squealing and panicking would attract a wandering shark. Aeschines (III.130 with schol.) refers to a similar attack seventeen years earlier, but it seems unlikely that two separate incidents took place, and most probably the attack has become misplaced in one or other of the accounts (Parker 2005: 109). The attack is the more striking (and ominous) because it took place so close to shore: sharks are deep-water fish, and one would not normally expect an attack in the harbour – sharks were far more of a danger to sailors and divers than to those on shore. In general the ancients tended to overplay shark attacks much as we do now: Pliny writes with gusto about the dangers they posed to sponge-divers (*NH* XI.152–3), and a rather gruesome elegy in the *Greek Anthology* (VII.506) relates the death of the diver Tharsys, who was bitten in two by a shark. A Geometric krater from Ischia (Museo Archeologico, Pithecusa 618813) depicts a shipwreck scene in which two large and toothy fish are in the process of eating the drowning sailors: one has lost an arm, another has, like Tharsys and the Athenian initiate, been bitten in two, while the third is being swallowed headfirst (Boardman 1998: fig. 161). Similarly, another elegy (*GA* IX.269) mentions a shark carrying off a shipwrecked sailor as he clings to a plank. As today, however, documented attacks such as the above are rare in the ancient sources.

2. A recipe for shark

Athenaeus Deipnosophistai 310C–E

‘And Archestratus gives the following advice in his admirable *Counsels*:

In the city of Torone you should buy cuts from the belly of the saw-toothed shark. Bake it with cumin and a little salt; it needs no other flavouring, my friend, except for some green olive oil. When it is baked, then you can add a sauce of pounded herbs and serve it. When you boil cuts from it in a hollow casserole, do not add either water from a sacred spring or vinegar; just pour over it a little oil, with some dried cumin and fragrant herbs. Take care as you boil it that it doesn’t catch the flame; stir it diligently, taking care not to let it burn.

Not many mortals know this heavenly dish; they refuse to eat shark, locust-witted as they are, because they are horrified by its habit of feeding on men. But every fish loves to eat human flesh, if they get the chance.’

COMMENT: Archestratus of Gela was the author of an epic-style poem on luxurious living (*Hedypatheia*) dating to the fourth century BCE. It is preserved only in fragments, primarily by Athenaeus, but seems to have presented a gastronomic tour of Greece, recommending specialities of different cities and giving advice on how to prepare them (Olson and Sens 2000). In this extract Archestratus recommends the *karcharias*, a species of shark, from Torone in the Chalcidice; it is noteworthy that Herodotus describes the sea off this peninsula as particularly full of sharks, recording the fate of the sailors in Mardonius’ army who were shipwrecked there in

492 (VI.44.3), a tradition which persisted into modern times (Papadopoulos and Ruscillo 2002: 208). Arcestratus says that shark is not a popular dish, and it is true that other writers dismiss both this and dogfish, though usually on the grounds of taste rather than morals: both Galen (*Alim. Fac.* VI.727) and Xenocrates (Oribas. II.58) say that it is foul-smelling and has an unpleasant texture, though Xenocrates adds that it is a gourmet choice. According to Oppian (*Hal.* V.365–75), fishing for shark could be very easy, since they gather around the fisherman's nets looking to snatch some of his catch, and the fisherman can just hook them up.

Bibliography

- J. Boardman, *Early Greek Vase Painting, 11th–6th Centuries BC: a handbook* (London 1998).
 A. Dalby, *Food in the Ancient World from A–Z* (London 2003).
 S.D. Olson and A. Sens, *Arcestratos of Gela: Greek culture and cuisine in the fourth century BCE* (Oxford 2000).
 J.K. Papadopoulos and D. Ruscillo, 'A *ketos* in early Athens: an archaeology of whales and sea monsters in the Greek world', *AJA* 106 (2002), 187–227.
 R. Parker, *Polytheism and Society at Athens* (Oxford 2005).
 D.S. Reese, 'Shark and ray remains in Aegean and Cypriote archaeology', *Opusc. Ath.* 15 (1984), 188–92.
 D.S. Reese, 'Fish: evidence from specimens, mosaics, wall paintings and Roman authors', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 274–91.
 D.W. Thompson, *A Glossary of Greek Fishes* (London 1947).

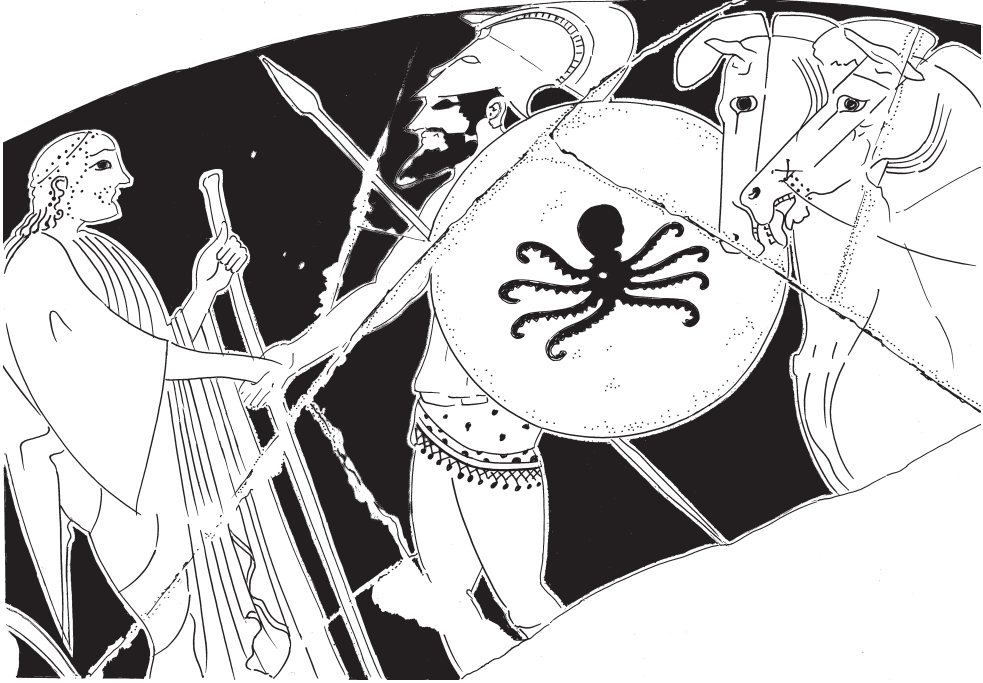
OCTOPUS

Unattested in ancient Egypt or Mesopotamia, the octopus (Greek and Latin *polypous*) is a common Mediterranean creature; when Greek and Roman artists drew seascapes, they included it as background detail as frequently as they did the fish and the dolphin. While the ancients were keenly aware of the differences between octopuses, cuttlefish and squid, they did not distinguish further between the four species of octopus in their coastal waters. Octopuses were widely fished and eaten – a famous red-figure cup by the Ambrosios Painter shows a young fisherman perched on a rock, under which an octopus lurks (Boston Museum of Fine Arts 01.8024: Boardman 1975: fig. 110) – and its habits were well understood by ancient zoological writers, who describe its hunting techniques, ability to change colour and reproduction (Ar. *HA* 621b 29–622a 34): Pliny describes its eggs laid in twisting coils (*NH* IX.163). A strange belief, that the octopus will eat its own tentacles in the absence of other food, goes back to Hesiod (*Works and Days* 524–5), and is repeated through antiquity (Ael. *NA* I.27) despite scientists' efforts to debunk the idea (see no. 2 below).

The octopus was characterised as a powerful and wily creature, and aspects of its behaviour became proverbial: in the *Odyssey* the shipwrecked Odysseus clings to the rocks like an octopus to its lair (V.432), and in Ovid's *Metamorphoses* the nymph Salmacis holds the youth Hermaphroditus as an octopus engulfs its prey (IV.366–7). Likewise its ability to change colour for protection or camouflage made it a suitable comparison for a changeable man (Athen. 513d). It was adopted as a symbol on coinage by several cities, including Eretria (Kraay 1976: figs 268–70), Syracuse (*SNG ANS* 129–39) and Croton (Kraay 1976: fig. 632), while the early coins of Phocaea depict their emblem, the seal, eating an octopus (Metcalf 2012: fig. 3.9). In antiquity as now, while the common octopus is small and easily fished, it gave rise to stories about terrifying giant octopuses which would attack ships or even come out on to land (see no. 3 below).

1. The cunning octopus

Attic red-figure cup, Berlin Pergamonmuseum F2264, from Vulci, attr. Oltos, c. 490 BCE (detail: drawing by Tessa Rickards)



COMMENT: Classical art is full of representations of the octopus, from the sinuous creatures on amphorae in Minoan 'Marine Style' (Betancourt 2007: 86–8) through images on Greek coins, to the combat between crayfish and octopus which was so popular on Roman mosaics (Toynbee 2013: 213–14). It was also a popular shield device on Greek vases: the Beazley Archive lists no fewer than 45 examples, and it even appears on the shield of Athena herself on one series of Panathenaic amphorae (Taranto 4319, 4320). The octopus, a soft-bodied and unaggressive animal, may not seem an obvious choice for a warrior's emblem, but it embodied a particular type of intelligence and cunning, examined effectively by Detienne and Vernant (1969). The characteristics of the octopus that impressed the Greeks were both its tenacity and its flexibility: it can change its shape and colour, while apparently defenceless it can kill creatures much more heavily armoured than itself, and it was even said to be able to take birds from the sky (Aelian NAVII.11) or drowning men. The representations on shield devices, as here, emphasise both the coiling tentacles and the head with brain and eyes, in reference to the octopus' flexibility and intelligence – what Detienne and Vernant call 'polymorphisme' – certainly desirable qualities in a warrior.

2. Eating octopus

Athenaeus Deipnosophistai 370c (= Ephippus fr. 3)

At Athens too cabbage is prepared for women who have given birth as a kind of antidote for nursing. And Ephippus says in his *Geryon*:

But then if this is the Amphidromia,
Why does no wreath hang at the door,
Nor any savoury smell tickle the end of my nose?
Now is the time to toast slices of Chersonnesian cheese,
To boil cabbage glistening with oil,
To stew chops of fat lamb,
To pluck doves, thrushes and finches,
At the same time to nibble at cuttlefish and squid,
To beat many an octopus tentacle enthusiastically,
And to drink many a cup of strong wine.

COMMENT: Athenaeus here quotes the fourth-century comic poet Ephippus on the subject of cabbage, but his depiction of the accustomed feast at the Amphidromia (the celebration ten days after the birth of a child, at which it was formally accepted into the *oikos*) includes octopus, squid and cuttlefish. Octopus was regularly eaten in both Greece and Rome (Thiercy 2008), and they are illustrated alongside other edible fish species on South Italian 'fish-plates' (Trendall 1989: figs 10b and 394; see FISH no. 9). A few Greek pots even show an octopus being presented by a lover to their beloved in the same way as other game (e.g. Davidson 1997: pl. 5). Before cooking it needs to be tenderised, which was done then (as now) by beating the octopus on a rock, hence the reference above. The Roman Apicius provides a recipe for octopus cooked in broth with pepper and *laser* (*De re coq.* 9.5); the Cynic philosopher Diogenes is said, in his search for a simple life, to have tried to eat an octopus raw, and to have died as a result (Plut. *Mor.* 995d).

3. A giant octopus

Pliny Natural History IX.85–7, 89–93

There are many kinds of octopus: those found near land are bigger than the deep-sea kind. They use all their tentacles as hands and feet, and the tail, which is forked and pointed, is used for mating. Octopuses have a syphon in their back through which they pass seawater: they can move this from one side to the other. They swim with their head on one side; while they are alive the head is very hard as though inflated. Otherwise they attach themselves by clinging with the suckers which are spread over their tentacles: they lay themselves flat so that they cannot be pulled up. They do not cling to the sea bottom, and when they are fully-grown they cling less strongly. Uniquely among soft-bodied fishes they go out onto dry land, as long as the surface is rough: they hate smooth terrain. They eat the meat of shell-fish, cracking the shells by squeezing with their tentacles: consequently one can detect their lairs by the fragments of shell which lie in front of them. And although in other ways the octopus is a stupid creature (for it will swim towards a man's hand), yet it shows some intelligence in its household

management: it takes its prey inside its lair, then once it has eaten the flesh, throws out the shells, and preys on the little fish which swim up to them. It changes its colour for camouflage, and also especially when it is frightened. The idea that it gnaws its own tentacles is false – it is the sea-eels which gnaw them – but it is true that the tentacles regrow, like the tails of geckoes and lizards.

I should not neglect to mention the information about octopuses compiled by Trebius Niger, a companion of L. Lucullus during his proconsulship of Baetica: he says that they are very greedy for shellfish, but at the octopus' touch the shellfish snap shut, cutting off the octopus' tentacles, thus gaining sustenance from their predator. Shellfish have no sight or any other sense apart from the ability to detect food and danger; so the octopuses lie in wait for them to open and drop into them a little stone, away from their body so it cannot be thrown out by the shellfish's palpitation: then they attack them with ease and extract the flesh, and the shellfish try in vain to close their shells, but cannot because they are wedged open. Thus even the most stupid of animals displays such cunning. Trebius also says that no other animal is so fearsome for killing men in the water, for it attacks men who have been shipwrecked, or divers, grasping them in its embrace, and drags them down and pulls them apart with its suckers. But if an octopus is turned on its back, its strength becomes feeble, for they stretch themselves out when they are supine.

The other story which Trebius relates seem more appropriate to a tale of marvels. In the fishponds at Carteia [on the Bay of Gibraltar] an octopus used to come out of the sea into their open tanks and steal the salted fish – it is amazing how the scent of salt-fish attracts all sea-creatures, for which reason fish-traps are smeared with it – and brought upon itself the wrath of the overseers, which was very great given the persistence of its thefts. They put up fences around the tanks, but the octopus used a tree to climb over these, nor could it be caught without being tracked by dogs. The dogs finally surrounded it as it was returning to the sea one night, and the overseers, alerted to the capture, were terrified by the animal's strangeness: first of all its unaccustomed size, then its colour, its coating of brine and its dreadful smell – who would have expected to find an octopus there, and who would recognise it? They thought they were facing some terrible monster, for it terrorised the dogs, now striking them with the ends of its tentacles, now hitting them with its stronger arms like clubs; and they were barely able to dispatch it using several tridents. They showed its head to Lucullus – it was the size of a fifteen-amphora barrel – and, as Trebius writes, 'had tentacles which one could hardly clasp with both arms, like knotted clubs, thirty feet long and with suckers the size of basins, and teeth of corresponding scale.' Its remains, which were kept as a prodigy, weighed 700 pounds.

COMMENT: Pliny's initial discussion of the octopus is fairly sober, noting its feeding habits and camouflage ability, and rejecting the tradition that it gnaws its own tentacles (see above). When he turns to the account of Trebius Niger, however, his tale of the giant marauding octopus is much more vivid and entertaining. Aelian (*NA* XIII.6) relates a very similar story about another giant octopus which made its way into the cellar of a house in Dicaearchia (Puteoli) via the sewers, and raided the jars of fish-pickle that were stored there: it took a group of men to trap it and chop it to pieces. It seems that Niger's account may underlie both tales, as Aelian includes the detail that the fish-merchants in his story were Iberian; Pliny adds further at IX.8 that octopuses are the largest sea-creatures to be found in the ocean west of Gades (Cadiz), growing so large that they cannot enter the Mediterranean through the Pillars of Hercules. A black-figure *dinos* in Würzburg

(inv. 527) seems to illustrate the giant octopus as described at IX.91 above, hunting shipwrecked sailors – around the rim of the vase, two ships at sea are menaced by a very large octopus shown rising above the surface of the waves.

There is obviously a significant contrast between the vast octopuses of the ancient imagination and the small shy sea-creatures of everyday, but one can see how the stories evolved: octopuses do sometimes cross dry land in search of better hunting grounds (Wood and Anderson 2004: 95, 99) – the claim that they climb trees in search of fruit, frequently repeated in antiquity, is, however, untrue (Athen. 317c; Ael. NA IX.45; Oppian *Hal.* IV.264–307) – and their strange appearance and habit of engulfing and strangling their prey undoubtedly led to the creation of lurid stories.

Bibliography

- P.P. Betancourt, *Introduction to Aegean Art* (Philadelphia 2007).
 J. Boardman, *Athenian Red Figured Vases: the archaic period* (London 1975).
 J. Davidson, *Courtesans and Fishcakes: the consuming passions of classical Athens* (London 1997).
 M. Detienne and J.-P. Vernant, 'La métis du renard et du poulpe', *REG* 82 (1969), 291–317.
 C.M. Kraay, *Archaic and Classical Greek Coins* (London 1976).
 W.E. Metcalf, *The Oxford Handbook of Greek and Roman Coinage* (Oxford 2012).
 P. Thiery, 'Bête comme ses huit pieds', in D. Auger and J. Peigny (eds), *Phileuripidès: Mélanges F. Jouan* (Nanterre 2008), 93–101.
 J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
 A.D. Trendall, *Red Figure Vases of South Italy and Sicily: a handbook* (London 1989).
 J.B. Wood and R.C. Anderson, 'Interspecific evaluation of octopus escape behaviour', *Journal of Applied Animal Welfare Science* 7 (2004) 95–106.

CRAB

Crabs make only fleeting appearances in Near Eastern literary sources. Occasional references are found to their distinctive form of movement: 'May . . . your sons and daughters to go backward like a crab' (Vassal Treaty of Eserhaddon 92). Crabs also appear in Near Eastern iconography; particularly finely rendered images are found in Neo-Assyrian palace reliefs showing aquatic scenes. Classical sources are a little more forthcoming: Aristotle asserts that there are many kinds of crab, too many to describe exhaustively, though he identifies the most distinctive species, including the edible crab (*karkinos*, *pagouros*), spider-crab (*maia*) and hermit-crab (*karkinion*) (*HA* 525b3–14). Technical writers show sound knowledge of the crab's form and habits, including the fact that crabs periodically shed their shell (Opp. *Hal.* I.283–304; Ar. *HA* 601a 10), and the peculiarities of the hermit-crab (Ar. *HA* 529b 20–530a 31; Pliny *NH* IX.97–9), but in general the Greeks and Romans were less impressed with the crab than with its fellow crustaceans the lobster and crayfish. The scattered references which we find in general literature concentrate on crabs only as a rather inferior form of food for humans, often recommended for domestic animals (see DUCK no. 4), or as an ingredient of medicines or charms. Pliny *NH* book 32 contains extensive references to the medicinal properties of both marine and freshwater crabs as cures for the bites of all venomous creatures, for fevers, ulcers, phthisis, burns and hair loss, and they also figure as amulets for the protection of crops and animals (Deonna 1954: n. 56).

1. Fishing for crabs

Greek Anthology VI.196

Crook-legged, with pinching claws, sand-burrower,
Backward-scuttling, neckless, eight-footed,
Swimming, compact, hard-shelled: Copasus
The line-fisher, dedicated this crab
To Pan as first-fruits of his catch.

COMMENT: This epigram follows a familiar riddle form, listing the qualities of the crab for several lines before naming it; it is one of series of epigrams in which practitioners of different trades or crafts dedicate appropriate objects to the gods. A similar epigram, VI.89, has a fisherman dedicating the shell of a lobster to Priapus, perhaps an implied joke that one would eat a lobster before dedicating it, but not a crab. Although Copasus here is a line-fisherman, Aelian *NA* VI.31 makes the unusual claim that crabs were fond of the music of the *aulos*, and that fishermen used the instruments to lure them out of the sea.

2. Crabs in art

Tetradrachm of Acragas, 470–420 BCE (SNGNS 893)



Inscription: AKRAC – ANTOS

COMMENT: The crab was the symbol of the Greek city of Acragas in Sicily from the earliest times, as it also was for the Ionian island of Cos; the Agrigentine crab is usually identified (Rutter 1997: 113) as a freshwater crab, referring to the river Acragas, while that of Cos is a sea crab. The Agrigentine crab was briefly borrowed by the state of Himera for its coins during the rule of the Emmenid tyrants (Rutter 1997: 120). Crabs appear on many coins (catalogued in Deonna 1954: 48–53), and as occasional shield devices on fifth-century Attic pots, which seems understandable given the crab's defensive strength and tenacity, though the two devices which depict a crab dancing and playing the *aulos* are more difficult to account for (volute krater, Karkinos Painter, NY MMA 59.11.20 and calyx-krater, Euphronios, NY MMA 1972.11.10). In the Roman period representations of crabs are most often symbolic, referring to the zodiacal sign or accompanying marine deities: the crab is notably absent from the very popular fish mosaics of the first century BCE, which instead give pride of place to the lobster (Meyboom 1977).

Bibliography

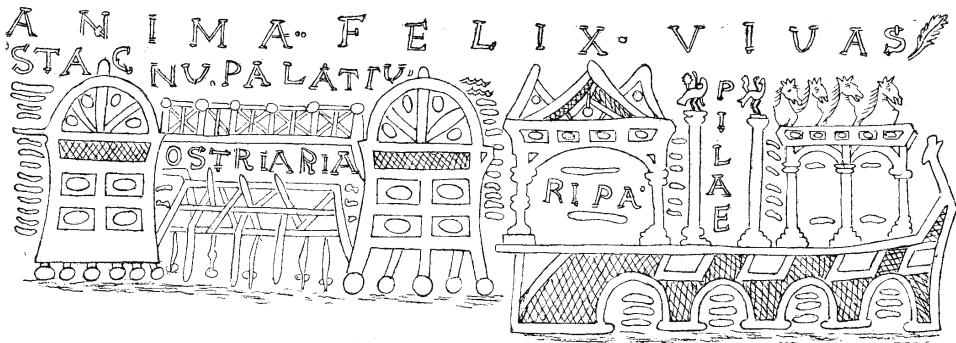
- W. Deonna, 'The crab and the butterfly: a study in animal symbolism', *Journal of the Warburg and Courtauld Institutes* 17 (1954), 47–86.
P.G.P. Meyboom, 'I mosaici pompeiani con figure di pesci', *MededRome* 37 (1977), 49–93.
N.K. Rutter, *Greek Coinages of Southern Italy and Sicily* (London 1997).

OYSTER

Oysters were widely eaten in Greece and the Roman Empire, and deposits of oyster shells are common at ancient sites, even those far from the coast (Marzano 2013: 189–90). Much of what was written about them by classical authors relates to their status value as food, listing the areas which produced particularly high-quality oysters and ranking their appeal to the discriminating diner. Pliny describes them as the 'prized delicacy' of Roman gastronomy (*NH* XXXII.59), and quotes a notable ostreophile, Mucianus, comparing the virtues of oysters from different regions (62). Ausonius, in the fifth century CE, wrote a verse epistle (*Ep.* 5) on the same topic, listing oyster-producing areas from Portugal and Britain to Abydos and Byzantium. As presented on a plate, then, there was considerable connoisseurship about oysters – Pliny also notes the purple line which marked the best kind of oyster, called *calliblephara*, 'beautiful-eyebrowed' (*NH* XXXII.61) – but the habits of the living oyster remained more mysterious. If fish and sea-mammals presented difficulties in observation and understanding, shellfish posed perhaps the greatest challenge. Aristotle, as usual, paid the closest attention to testaceans and made a series of observations about bivalve shellfish: he describes their internal structure, including mouth, gut and vent (though he says that the organs are difficult to see), argues that they must have some means of sensing danger because they close their shells when approached and says that they live by filtering sea water (*HA* 529a 26–b19, 535a 6–b25, 590a 18–22). Little of this, however, found its way into the work of subsequent writers, where we find more popular interpretations: oysters were held to wax and wane with the moon and to be affected by sun and wind (Ael. *NA* IX.6; Plin, *NH* XXXII.59–60), and all ancient writers, Aristotle included, believed that oysters were spontaneously generated out of mud or sand (Ar. *HA* 547b 12–13, 20).

1. The oyster-beds at Baiae

Engraved glass flask from Piombino, now in New York Corning Museum, late third–early fourth century CE (after Günther 1897: fig. 1)



COMMENT: The engraving above appears on a glass flask found in ancient Populonia, one of a group of fifteen such flasks with similar decoration (Painter 1975; Fujii 2009). The decoration depicts the distinctive buildings at Baiae on the Bay of Naples, including the palace with lake, seashore, breakwater and portico. It is thought that the flasks functioned as souvenirs: they are both delicate and expensive, but Baiae was notoriously a resort for the rich. On the left is a depiction of the famed oyster-farms of Baiae, depicted as lattice of poles supported on posts from which weighted ropes dangle, labelled 'ostriaria'. Pliny tells us that oyster farms were invented by Sergius Orata at the beginning of the first century BCE (IX.168–9) in the Bay of Naples region and grew to be a significant venture in Lakes Lucrinus and Avernus, and in the lagoon of Baiae itself (Marzano 2013: 175–8). In Pliny's own time oysters were brought from Brundisium (Lake Avernus) to be raised in Baiae – Pliny says charmingly that oysters enjoy travelling and being introduced to new waters (XXXII.161).

The farming of oysters was known locally in Greece (Ar. GA 763b 1–5), but oyster-farming on a commercial scale was a Roman invention. The technique involved the collection of oyster larvae – in the early stages of its life cycle the oyster larva is free-swimming, and settles on a shell to root and begin growing: at this stage they can be collected on removable objects such as tiles or branches – and their transplantation to the ropes which hang from the lattice of poles, where they matured (Marzano 2013: 179–82). Oysters were raised in the Bay of Naples in very large numbers, and their reputation was lasting: a letter in Cassiodorus (*Var.* IX.6.3) from the sixth century CE mentions the famous oysters as one of the attractions of a holiday at Baiae.

2. Pearl-oysters in the Indian Ocean

Athenaeus Deipnosophistai 93c–94b

According to Isidorus of Charax, in his *Geographical Description of Parthia*, there is said to be an island in the Persian Gulf where very many pearls are found. The island is surrounded by rafts made from reeds, and from these divers go twenty fathoms down into the sea and bring up bivalve shells. They say that when there are continual thunderstorms and rain the pinnas (= pearl-oysters) breed in the greatest numbers and produce the most and largest pearls. In the winter the pinnas sink down into their hiding-places at the bottom of the sea; in the summer, however, they gape open at night as they swim around, and close themselves up during the day. Those which cling to rocks and reefs put down roots and settle there, making pearls. They survive and feed themselves through that part which adheres to their flesh; this grows at the mouth of the shell and has claws with which it draws in food. It has the shape of a tiny crab, and is called the 'pinna-guard'. The flesh of the pinna stretches from the mouth to the middle of the shell like a root, and it is here that the pearl is formed and grows, drawing its nourishment from the hard part of the shell, as long as it remains in contact with it. But when the flesh grows along the shell and under the pearl, gently separating it from the shell, it enfolds it so that the pearl ceases to grow, but becomes smoother, more translucent and clearer. The pinna which lives in the deep sea produces the most luminous, clearest and largest pearls, whereas those which rise up towards the surface, because they are affected by the sun's rays, produce smaller, discoloured pearls. The pearl divers take a risk whenever they stretch their hands into the gaping shell because the pinna snaps shut and often cuts off their fingers, and some even die of the injury there and then. But if they succeed in working a hand sideways under the shell, it is then easily pulled away from the rock.

COMMENT: As part of his discussion of shellfish, Athenaeus compiled a series of accounts from Greek authors of the pearl-oyster and how it produces pearls. Because pearl-oysters are not native to the Mediterranean, all pearls were imported from the Indian Ocean and Persian Gulf, and the process of their formation was subject to much speculation. Androsthenes (Athen. 93a) gives a reasonably accurate description of the shell (like a scallop, but not grooved, with a smooth, thick shell), but Isidorus shows more confusion, referring to the oysters as ‘pinnae’, probably because the pinna or fan-mussel is a Mediterranean species which does produce small dark pearls, and introducing the idea of the pinna-guard crab (see Ar. *HA* 547b 14–18), which he interprets as part of the shellfish rather than a symbiotic creature. He does, however, describe oysters as living animals and understands the formation of the pearl on the shell, unlike others who attribute it to dew or wind (Ael. *NA* X.13; Plin. *NH* IX.107). There was considerable doubt as to whether pearl-oysters were free-swimming or anchored – both Aelian (XV.8) and Pliny (IX.111) relate the belief that pearl-oysters live in schools with a ‘king shell’ as leaders, which marshals the other oysters to avoid capture, and that divers try to catch the king shell because if they can, the rest of the oysters will become confused and be easily netted. Isidorus, likewise, implies that some pearl-oysters move about in the sea. The idea that an oyster will snap shut and cut off a diver’s fingers is undoubtedly an invention intended to make the hunting seem more heroic; in fact the shells were simply drawn up and opened.

As Pliny’s long account (*NH* IX.104–23) demonstrates, pearls were very significant in Roman times as a form of luxury: the expeditions of Caesar and Claudius to Britain were in part motivated by the search for pearls from this region, though in fact British pearls come from freshwater mussels, and are considered to be of inferior quality.

Bibliography

- Y. Fujii, ‘Report on four Roman glass fragments from the Gorga collection: attribution to the Puteoli-Baiae Group’, in K. Janssens et al. (eds), *Annales du 17e Congrès de l’Association Internationale pour l’Histoire du Verre, Antwerp 2006* (Brussels 2009), 136–42.
- R.T. Günther, ‘The oyster culture of the ancient Romans’, *Journal of the Marine Biological Association of the United Kingdom* 4 (1897), 360–5.
- A. Marzano, *Harvesting the Sea: the exploitation of marine resources in the Roman Mediterranean* (Oxford 2013).
- K.S. Painter, ‘Roman flasks with scenes of Baiae and Puteoli’, *Journal of Glass Studies* 17 (1975), 54–67.
- D. Whitehouse, *Roman Glass in the Corning Museum of Glass*, vol.3 (New York 1997).

MUREX

The murex or purple-dye snail (*Bolinus brandaris*) is most often discussed by modern scholars in the context of ancient industrial production, as the raw material of purple dye manufacture, and extensive archaeological studies have been made of their remains (crushed shells) at ancient dye works. But the murex was a living creature, and one of an interesting kind – a carnivorous marine gastropod which preyed on other shellfish – and was far better understood by ancient writers than by most classical scholars today. Aristotle knew a great deal about murex from personal observation; he gives anatomical information about both the dye gland and other internal structures, including the hard proboscis (*HA* 547a 16–b 6, 528b 29–33; *PA* 685a 9–12). He also describes the reproduction of murex, through the production of a substance like honeycomb, though he and his successors remained convinced that all shellfish were ultimately generated from mud (*HA* 546b 18–547a 4). The exploitation of murex for dye has a very long history

in the Mediterranean, going back to the Bronze Age (Marzano 2013: 144), but the discovery of the dye gland was undoubtedly the result of murex first being eaten, and they continued to be caught for the table in coastal areas: at Pompeii about 150 unbroken murex shells were found (Reese 2001: 296–8). As Marzano notes, murex shells are identifiable in both fish mosaics and on the ‘unswept floor’ mosaics depicting after-dinner refuse (2013: 148 n.35; see Reese 2001: figs 226–9). The shells were also used as decorative objects (Martial *Ep.* III.82.27), and when burnt, as an ingredient in medicines (e.g. Pliny *NH* XXIX.84, 106–7, 125, 129).

Later Roman writers created a mythological aetiology for the discovery of the dye-murex, relating that Herakles was walking on the shore with his dog, which ate a murex and found its muzzle dyed purple (Pollux *Onom.* I. 45–8); the story forms the subject of a painting by Rubens, *Hercules and the Discovery of the Secret of Purple*, now in the Musée Bonnat in Bayonne, though Rubens gave the murex a smooth nautiloid shell instead of an upright spiny one.

1. The murex and its habits

Pliny Natural History IX.125–32 (extracts)

Purples live for at most seven years; they hide themselves away for thirty days around the rising of the Dogstar, like murex. In spring they congregate, and the rubbing together of their shells causes them to produce a kind of wax. This is very similar to murex, but purples have in the middle of their throat that dye-gland which is so sought after for dyeing clothes: they have a white vein filled with a little fluid through which the precious dye is drained, of a gleaming deep rosy colour: the rest of the body has none. Fishermen try to capture them alive, since as they die they vomit out their juice; so the dye is got from larger purples by stripping off their shell, and the smaller ones are crushed while still alive to make them discharge the juice.

The tongue of the purple is as long as a finger, and used to feed by boring through the shells of other shellfish, so hard is the point. They are killed by fresh water, and wherever rivers run into the sea, but once caught they can live for up to fifty days on their own slime. All shellfish grow very rapidly, and purples in particular: they reach their full size in a year.

There are two kinds of shellfish which provide purple and red dyes: the substance of the dyes is the same, but there is a difference in the way they are combined. The trumpet-shell is smaller and is named for its similarity to the shell which gives out the sound of a trumpet; it has a rounded opening with incisions around the edge. The purple has a very lengthy beak with a channel along it which is tubular at the inward end, through which it extends its tongue; as well as this it has spines on the coils of the shell, up to seven on each coil, which the trumpet-shell lacks. Both, however, have as many coils as they are years old. Trumpet-shells are only found clinging to rocks, and are gathered around sea ledges.

Purples are also called ‘*pelagiae*’; there are many different kinds, distinguished by their food and habitat: the mud-purple lives on putrid slime and the seaweed-purple on seaweed, both of these being of the poorest quality. The reef-purple, found on reefs at sea, is better, but even so still lighter and weaker. The pebble-purple is so-called from pebbles in the sea, and is very good for red dyes, but by far the best is the wandering purple which feeds in all different kinds of places. Purples are caught in a kind of wicker fish-trap with very fine mesh which is laid out at sea. These are baited with shellfish which close with a snap as we have seen mussels do. These shellfish, when they are half-dead

and then returned to the sea, come back to life and gape open eagerly; the purples are attracted to them and attack them with an outstretched tongue. But when they feel the prick of the purple's tongue the shells snap shut on their attacker, and thus the purples are drawn up, caught and hanging because of their own greed.

COMMENT: Pliny's taxonomy of the dye-producing snails is clear and detailed: he describes both the whelk (*Stramonita haemastoma*), which he calls the trumpet-shell, and the murex, giving a very good description of its spiny and attenuated shell. He then distinguishes between murex in general, and those which produce dye, which he calls 'purples'. These he divides into numerous classes according to habitat, although there are in fact only two species of dye-producing murex in the Mediterranean, the purple dye murex (*Bolinus brandaris*) and the banded dye murex (*Hexaplex trunculus*). Not all Pliny's information about their anatomy is accurate – the murex does not extend its proboscis along the length of the shell, for instance – but he understands the snail's method of feeding, mentioning the hard boring point of the proboscis, and at XXIX.120 he refers to the hard operculum which covers the opening of the shell.

The account of how murex are caught is a popular one because of its moral aspect, appearing in Aelian (*NAVII*.34) and Oppian (*Hal.V*. 598–9), depicting a voracious predator caught through its own gluttony. Pliny's idea that the murex is caught and held fast by a snapping bivalve is clearly fanciful: Aelian says more practically that a whelk is used as bait, and Aristotle comments that it is common for the murex to drop off the bait if it is satiated (*HA* 547a 31–4). Fishing for murex was a specialist occupation: in Herodotus' account of the foundation of Cyrene (*IV*.151) it is a purple-fisherman, Coroebius, who guides the settlers to Libya, and hereditary *collegia* of murex-fishers existed in the Roman Empire (*Cod. Theod.* X.20.16).

Bibliography

- A. Marzano, *Harvesting the Sea: the exploitation of marine resources in the Roman Mediterranean* (Oxford 2013).
D.S. Reese, 'Marine invertebrates, freshwater shells and land snails: evidence from specimens, mosaics, wall-paintings, sculpture, jewelry and Roman authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 292–314.
WoRMS Editorial Board (2016). *World Register of Marine Species*. <http://www.marinespecies.org> at VLIZ. Accessed 2016-08-15. doi:10.14284/170

4

WORKING ANIMALS

The domestication of animals has traditionally been interpreted as a process governed by human agency: the bringing of animals into control for exploitation as food, for work or for pleasure (Ingold 1994; O'Connor 1997). With reference to work, this can all too easily imply the idea of 'use' – that animals are 'used' by humans as sentient tools to extend human labour – and particularly when treating the ancient world, this can lead to some easy assumptions about the role of animal labour. It is certainly true that animals had (and have) a much greater role to play in pre-industrial and rural societies: only since the invention of the internal combustion engine have people in the developed world come to lead a life without dependence on visible animal labour. But while ancient societies were more dependent on animals for transport, haulage and motive power, it is important not to construct this as a purely top-down relationship.

Modern studies of animal labour and animal-human interactions have cast new light on the relationships between humans, animals and work. First, there is the broad question of how animal work is defined: we do not as a rule think that animals 'work' when they hunt for food or bring up their young (though we may define such actions as work when performed by humans), nor would we count the emotional work done by pets or ridden animals when they respond to an owner's moods or wishes (Coulter 2016: 55–95). But the animal's view of what constitutes work is inevitably much broader than the drover's or shepherd's, and we might wish to extend some of our conclusions about laboursing animals to pets or agricultural livestock too. Likewise we tend to overlook the issue of partnership in animal work: an ox cannot plough without a ploughman, or an elephant go into battle without a mahout. Animal work implies human work, and close bonds could develop between working animals and those who laboured alongside them. Linked to this is the issue of animal agency: anthropologists have considered the role of animals (and indeed of objects too) in social networks, and have emphasised the agency in action which the working animal can possess (Hurn 2012: 132–5). Of course such agency can be constructed from a human point of view as 'disobedience' or 'lack of ability', but attitudes in antiquity were in fact more accepting of animal subjectivity and agency: animals were certainly not seen as 'animate tools', meaning that we find sources that consider their resistance in work and their role as members of the extended household – the institution of holidays for animals, especially in Rome, speaks very clearly to the idea of working animals as sharing the experience of human workers (below no. 4, and Lewis forthcoming).

The passages here thus show a variety of aspects of animal 'work', in the sense of labour imposed by humans for their benefit, and it is quite broad, from the more obvious areas of haulage

and communications to performance and participation in sport. All have in common, however, the element of investment in training of an animal for work, and the creation of a reciprocal relationship between the animal and its human facilitator. Social status also becomes relevant in this context, since lower social status implies a closer relationship with a working animal: a plough ox or a trained monkey was essential to a poorer owner's survival in the way that a cavalry horse or pet parrot was not, while a haulier would need to know and adapt to the personalities and habits of his mules or oxen. Indeed slaves such as grooms or dog-handlers could be required to have a closer physical relationship with their charges than the owners (see PETS no. 3). The latter case also highlights the intensely hierarchical nature of ancient societies, in which the demarcation between animal work and human work was far less sharp: in many cases slaves and working animals would labour side by side (see *Ar. Pol.* 1252b 9–12).

A second striking feature of the passages collected here is the enthusiasm with which non-native animals were adopted into the workforce of different cultures as they encountered them. From the hunting cheetahs imported from India to Mesopotamia, to the war elephants brought to Europe by the Hellenistic successor kings, new roles were created for new animals; working camels, performing monkeys and Celtic wolfhounds all extended their range from their native areas, with humans as the vectors of their spread.

AGRICULTURE

1. The value of working animals

Hittite Laws, cuneiform tablets from Hattusa, c. 1650–1100 BCE (after Hoffner 1997)

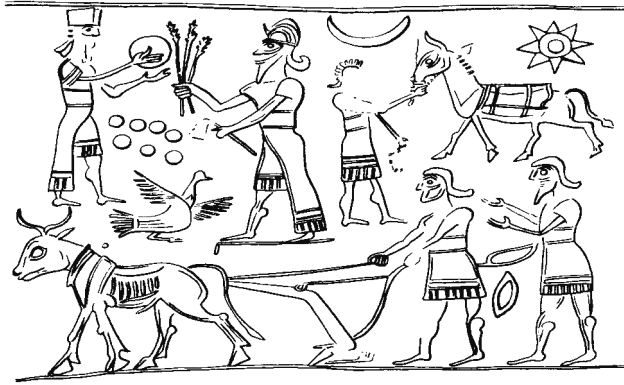
- §57. If anyone steals a bull – if it is a weanling calf, it is not a 'bull'; if it is a yearling calf, it is not a 'bull', if it is a two-year old bovine, that is a 'bull'. Formerly they gave 20 cattle. But now he shall give 15 cattle: 5 two-year-olds, 5 yearlings and 5 weanlings, and he shall look to his house for it.
- §58. If anyone steals a stallion – if it is a weanling, it is not a 'stallion'; if it is a yearling, it is not a 'stallion'; if it is a two-year-old, that is a 'stallion'. They used to give 30 horses. But now he shall give 15 horses: 5 two-year-olds, 5 yearlings and 5 weanlings, and he shall look to his house for it.
- §59. If anyone steals a ram, they used to give 30 sheep. Now he shall give [15] sheep: he shall give 5 ewes, 5 wethers and 5 lambs. And he shall look to his house for it.
- §60. If anyone finds a bull and castrates it, (when) its owner claims it, (the finder) shall give 7 cattle: 2 two-year-olds, 3 yearlings, and 2 weanlings, and he shall look to his house for it.
- §61. If anyone finds a stallion and castrates it, (when) its owner claims it, (the finder) shall give 7 horses: 2 two-year-olds, 3 yearlings, and 2 weanlings, and he shall look to his house for it.
- §62. If anyone finds a ram and castrates it, (when) its owner identifies it, (the finder) shall give 7 sheep: 2 ewes, 3 wethers, and 2 (sexually) immature sheep, and he shall look to his house for it.
- §63. If anyone steals a plough ox, formerly they gave 15 cattle: 3 two-year-olds, 3 yearlings, and 4 weanlings, and he shall look to his house for it.

- §64. If anyone steals a draught horse, its disposition is the same.
- §65. If anyone steals a trained he-goat, or a trained deer, or a trained mountain goat [i.e. decoys], their disposition is the same as of the theft of a plough ox.
- §66. If a plough ox, a draught horse, a cow or a mare strays into another corral, if a trained he-goat, a ewe, or a wether strays into (another) pen, and its owner finds it, he shall take it (back) in full value. He shall not have the (pen's owner) arrested as a thief.
- §71. If anyone finds a (stray) ox, a horse, a mule (or) a donkey, he shall drive it to the king's gate. If he finds it in the country, they shall present it to the elders. (The finder) shall harness it (i.e., use it while it is in his custody). When its owner finds it, he shall take it in full value, but he shall not have him (the finder) arrested as a thief. But if (the finder) does not present it to the elders, he shall be considered a thief.
- §74. If anyone breaks the horn or leg of an ox, he shall take that ox for himself and give an ox in good condition to the owner of the (injured) ox. If the owner of the ox says, 'I will take my own ox'. He shall take his ox, and (the offender) shall pay 2 shekels of silver.
- §75. If anyone hitches up an ox, a horse, a mule or an ass, and it dies, or a wolf devours (it), or it gets lost, he shall replace it at face value. But if he says, 'It died by the hand of a god', he shall take an oath (to that effect).
- §77a&b. If anyone strikes a pregnant cow, thus causing it to miscarry, he shall pay 2 shekels of silver. If anyone strikes a pregnant mare and causes it to miscarry, he shall pay 3 shekels of silver. If anyone blinds the eye of an ox or an ass, he shall pay 6 shekels of silver, and he shall look to his house for it.
- §87. If anyone strikes the dog of a herdsman a lethal blow, he shall pay 20 shekels of silver, and he shall look to his house for it.
- §163. If anyone's animals are smitten (with disease) by a god, and the (owner) performs a purification ritual upon them, and drives them back home, and he puts the mud (used in the ritual) on the mud pile, but doesn't tell his colleague, so that the colleague – not knowing – drives his own animals there, and they die, there will be compensation.

COMMENT: Livestock are the subject of many paragraphs in the Hittite laws and a fear of theft and any subsequent harm which might come to the animal was of especial concern. The laws classify the animals according to the severity of the punishment imposed on the thief for stealing them. The repeated phrase '[he] shall look to his house for it' suggests that the thief's family was deemed to be as guilty as an individual who perpetrated the crime. Bryce (2012: 46) explains that the very severe penalties may reflect the need to safeguard the community's welfare, as working animals were essential to its survival. The severity of some penalties might well reflect the fact that the stolen animals were sold or even slaughtered, a concept also suggested in Hebrew law (Exodus 22: 1: 'if a man shall steal an ox, or a sheep, and kill it or sell it, he shall restore five oxen for an ox, and four sheep for a sheep').

2. Labouring oxen

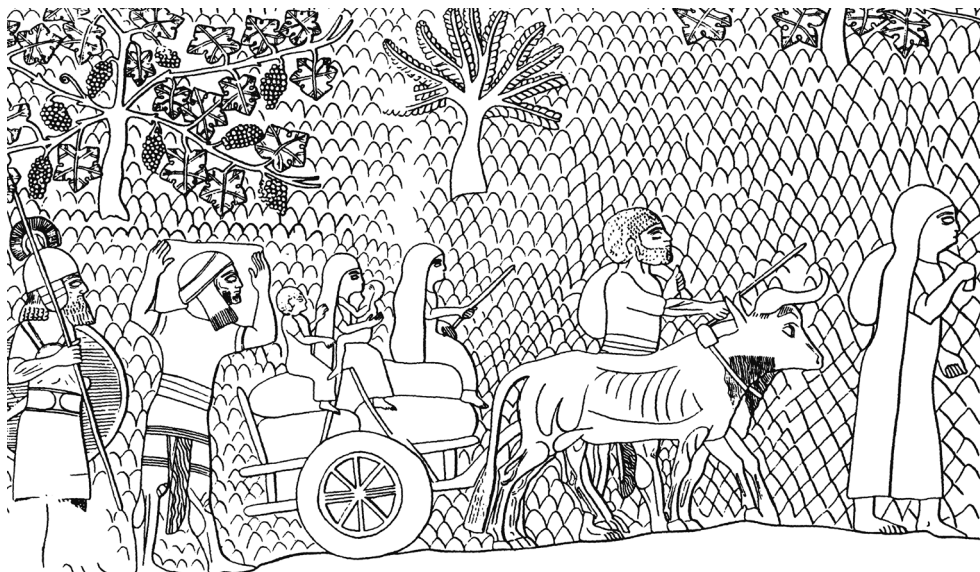
a) Neo-Assyrian cylinder seal, c. 850 BCE (after Keel 1978: 75)



b) Painted wall relief from the tomb of Sennedjem, Thebes, XIX Dynasty



c) Assyrian relief sculpture depicting refugees fleeing the city of Lacish, c. 700–681 BCE, from the South-West Palace of Sennacherib, Nineveh (London, British Museum 124915)



COMMENT: Oxen were indispensable animals for agriculture and innumerable scenes from Near Eastern seals and Egyptian tombs and papyri show these animals pulling the plough, trampling the soil in order to bury seeds, or trampling the ears to detach the grain. They usually worked in pairs – although in a piece of biblical hyperbole (1 Kings 19: 19–21) the Hebrew prophet Elisha supposedly ploughed with twenty-four oxen.

The earliest evidence for ploughs in Mesopotamia appears towards the close of the fourth millennium BCE in pictographs on the clay tablets from Uruk. The earliest plough was a beam-ard, a simple machine pulled by oxen which scratched a furrow without turning the soil; the design of the plough changed very little throughout Mesopotamian history. Seed ploughs, with a funnel through which seed was dropped into the furrow, were developed around 2300 BCE. The Hebrew Bible suggests that oxen were used almost exclusively for ploughing (1 Samuel 14:14; Isaiah 5:10), the term ‘oxen’ meaning both sexes of the animal, cows as well as castrated bulls. This explains the reason for the law concerning a heifer being used for sacrificial purposes ‘upon which never came the yoke’ (Numbers 19:2). The Torah forbade ploughing with an ox and an ass yoked together (Deuteronomy 22:10) but in spite of this prohibition, the prophet Isaiah spoke of both the ox and the donkey being used for ploughing: ‘Blessed are you that sow beside all waters, that send forth there the feet of the ox and the ass’ (Isaiah 32:20).

Bovines also served as draught animals, pulling carts and wagons (c above). Thutmosis III had his dismantled ships pulled by oxen to the city of Carchemish on the Euphrates, and depicting the battle of Kadesh shows that Ramses II had used harnessed bovines pulling military supplies on wagons. In Egypt these scenes of draught oxen pulling wagons with wheels are usually found in scenes depicting foreigners or in foreign locales; the wagon does not appear in Egypt until the later New Kingdom since the Egyptians preferred the sledge. Numerous New Kingdom tomb-scenes

show the sarcophagus of the dead on a sledge being hauled toward its final home by harnessed bovine. In Egypt and Mesopotamia oxen were also employed to drag boats against river currents.

3. Resistance to work

a) Aesop 582 (Perry): The unwilling ox

When his ox refused the traces and was unwilling to submit its calloused neck to the grip of the yoke, the farmer trimmed its horns, cutting them slantwise, and thought that this would calm the angry beast. He then carefully yoked the ox to a huge plough, for it was quick to strike with horn and hoof, thinking, no doubt, that the long beam would prevent the ox goring or lashing out with its hooves. But the ox was just as unwilling, pulling against the harness and continually stamping on the earth in frustration. His stamping scattered the ploughed soil into the air, and it blew into the farmer's face as he followed the plough. At this point the farmer gave up, shaking the dust and dirt from his hair, and said, 'This just goes to show how much harm can be done when a creature uses its intelligence to wreak havoc.'

b) Aesop 180 (Perry): The donkey carrying salt

A pedlar who owned a donkey heard that salt was selling cheaply, and immediately bought a great amount, which he loaded onto his animal. The donkey, going along reluctantly, fell into a stream; the salt dissolved, lightening his burden, and the donkey was able to get up and go along easily. The pedlar, however, turned back and bought another load of salt, bigger than the last, and once more loaded up the donkey. When the donkey once again came to the stream, he deliberately slipped and fell in, and his burden was washed away. At this, the pedlar formed a plan to outwit the donkey; he bought a quantity of sponges, and loaded the animal with these. On the way home the donkey purposefully fell into the river as before, but the sponges immediately soaked full of water, and gave him a double burden to carry.

The moral of the story is that often bad fortune follows good.

COMMENT: Traditional top-down views of domestication present working animals simply as the tools of humans, but examples of animal agency are not difficult to find in antiquity. In both these fables the plough ox and the pack ass defy their owners' wishes and refuse to carry out their tasks. At first sight this seems no more than a problem for the ploughman or pedlar, but the stories in fact reveal some deeper truths. The tale of the unwilling ox demonstrates that agricultural work was a partnership: a farmer and an ox need to work together for a successful outcome. Because a trained ox was such a significant investment (see OX no. 14) it could not simply be exchanged or traded if its work was unsatisfactory – a farmer or haulier needed to work at a co-operative relationship. It is noteworthy that Columella, discussing the training of draught oxen, assumes that each animal will have its own personality – some are lazy, some nervous, some afraid of difficult work – and describes methods of adapting the training to cure these faults. He says that some trainers attempt to use force or pain to make the ox follow instruction, but sees this as counterproductive precisely because it undermines the working relationship which is needed (*De re rust.* VI.2.10–14).

In the second fable a donkey and its owner are locked in a battle of wits as the donkey tries to escape its burdens, and the owner to prevent its resistant behaviour. In the Greek popular tradition

the donkey is the subject of many stories focusing on its endless toil and poor treatment, but it is also regularly characterised as resourceful and resistant to its condition, offering an interesting parallel to the peasant himself. The Spartan poet Tyrtaeus famously compared the helots of Sparta to asses, 'worn out, carrying great burdens. . . ' (fr. 6.1–2), and the parallel between the peasant and donkey is not solely metaphorical. The donkey was hardworked because people were hardworked too, and they struggled alongside each other to make a living. Donkeys were overworked (as is still the situation in many countries) because their owners' situation was precarious, and they went hungry because their owners' resources were few. This common experience underlies many fables about donkeys, and explains some of the complex attitudes towards them: just as with the ox, the pedlar does not turn to force to deal with his donkey, but engages with it as an intelligent creature.

4. The worst of working conditions?

Apuleius Metamorphoses IX.10.4–13.3

On the following day I was brought out and offered for auction once again, and sold to a miller from a neighbouring village for seven *nummi* more than the price Philebus had paid for me. After loading me heavily with the grain which he had also purchased, the miller led me along a steep track rough with stones and treestumps to his mill.

There many draught animals trudged around turning the mills, large and small, in endless circuits, not only all day, but through the night as well, keeping up, by the ceaseless rotation of the mills, a continuous production of flour.

[. . .]

Early the next day I was harnessed to what seemed to be the largest of the mills, put in blinkers and driven into the circular course of a well-worn track, to walk around and around the fixed circuit, endlessly retracing my steps.

[. . .]

When evening arrived and I was completely worn out, the rope harness which hitched me to the mill was unfastened and I was tethered at the manger. Although I was very tired and in great need of restoring my strength, and indeed nearly dead from hunger, nevertheless I was nervous and anxious with my usual concern about my surroundings, and so I left the plentiful fodder for later, and observed with interest the routine of this unpleasant workplace. Ye gods, what a condition the slaves there were in! Their skin was patterned with livid weals and their backs with marks of whipping, barely covered by ragged tunics; some had no more than a cloth to cover their loins, and all were clad in rags full of holes. Their faces were tattooed and their heads shaved; they wore fetters on their ankles; their skin was deathly pale and their eyelids inflamed by the thick smoky vapours of the interior, making them half-blind. Just like boxers who sprinkle themselves with dust, they were stained white with ashy flour.

And now how can I describe my fellow draught animals? Such elderly mules and broken-down geldings stood around the manger, heads hanging down, munching on piles of chaff; their necks were withered and sagging with festering wounds, their nostrils flared by the force of constant coughing and their chests raw from the constant rubbing of the rope harness. Their sides were laid bare almost to the bone from continual beating, their hooves worn flat by the endless circuits of the mills, and their hides coarsened by old dirt and mange. Fearing that I too would become part of this dismal family, and remembering the good fortune of the Lucius I used to be, brought to the limit of my resources, I too hung my head and lamented.

COMMENT: This extract from Apuleius' *Golden Ass* is one of the most often-quoted passages on the working conditions of both animals and slaves at Rome. How seriously can we take it, given that it is part of a story narrated by a human turned into a donkey? Apuleius' tale dwells on the extreme and the grotesque, and the two parallel descriptions of wretched slaves and worn-out draught animals are certainly written for effect. Nevertheless the description does seem to be based on reality: mill donkeys, which spent their days pacing in a small circle indoors to turn a millstone for grinding grain, existed in large numbers in the Roman world: large-scale animal-turned mills are common in Roman towns (Moritz 1958). There appears to have been a consensus among writers that this was a particularly hard life for an animal because the work was repetitive and unnatural, with donkeys either blinkered (as in this passage) or blindfolded to prevent dizziness. Being sent to the mill figures in literature as the worst possible fate for a horse (see HORSE no. 22), and it was also used as a punishment for human slaves, as the fact that the slaves in this passage are said to be tattooed and fettered would suggest (Hijmans et al. 1995: 121–3). Apuleius' juxtaposition of the two groups, draught animals and slaves, emphasises the fact that hard working conditions were not limited to non-human animals: enslaved humans and animals laboured side by side, part of a complex hierarchy.

On the one hand, then, Apuleius shows us what were thought to be the worst of working conditions, yet even the mill donkeys had their own festival in the Roman calendar, the *Vestalia* on the ninth of June. At this festival in honour of Vesta, goddess of the hearth, mill donkeys received a holiday, and were garlanded (Ov. *Fasti* 6.311–18); a painting once in the *macellum* at Pompeii shows two donkeys at this festival with cupids (King 2001: fig. 348). It is worth remembering that a working donkey's life could be as long as twenty-five years, and the existence of an annual holiday suggests once again that they were not seen just as 'animate tools', but as participants in working life (Lewis forthcoming).

5. Farm dogs and herd dogs

Columella, De Agricultura 7.12–13.3

Now, as I promised earlier, I shall speak of the dumb guardians of the flocks, although it is wrong to call a dog a 'dumb guardian'. For who among men gives a clearer or louder warning of wild animals or robbers, than the dog does by barking? Which servant is more devoted to his master? Which companion is more faithful, which guardian more trustworthy? Could one find a more vigilant watchman? And who could be a more reliable defender and avenger? For these reasons all farmers should buy and keep a dog, because it guards the farm crops, the flocks and the household. There are, however, three different reasons for acquiring and keeping a dog: the first kind is chosen for protection against human thieves, and guards the farm and its steadings; the second is kept to ward off depredation by men and by wild animals: this dog watches over the stables at home and the outdoor flocks. The third type of dog is bought for hunting, but this is not only useless to the farmer, but distracts him from his work. Therefore we should discuss the farm dog and the herd dog; the hunting dog is not relevant to our concerns.

A guard dog for the farm should have a large body and a loud ringing bark, so that thieves will be frightened just by hearing and seeing it, and will sometimes flee at the sight of it and its growling. It should be all one colour, white for sheepdogs and black for a guard dog: particoloured dogs are good for neither. The shepherd favours a white dog because it is distinct from a wild animal, and it is important that when driving off wolves at dawn or dusk, he does not strike the dog by mistake for one of the beasts. A black

guard dog, which defends against human thieves, will seem more terrifying to a burglar who comes by day, while at night it will be harder to see in the shadows, meaning that the dog will have the advantage over the burglar under the protection of the dark. The best dog is stocky rather than long or short, with a large head which dominates the body, ears which hang down, dark or grey eyes with a keen shine to them, a strong shaggy chest, broad shoulders, stout and hairy legs, a short tail and feet with long joints and claws, which the Greeks call *drakes*. These are the desirable features of a guard dog.

Its nature should be neither too gentle, nor on the other hand too fierce and vicious; the former will fawn even on thieves, while the latter will turn on members of the household. It is best for guard dogs to be fierce and not good-natured, so that they will sometimes even snap angrily at their fellow slaves, and will always break out in anger at outsiders. Most of all they should be watchful at their post and not wander, but they should be attentive and careful rather than rash. An attentive dog will not raise the alarm without good reason, whereas a rash one will be stirred up by odd noises and false alarms. It is worth noting these things, in my view, because character is formed both by nature and by training, so that when we have the chance to buy a dog we may look for these qualities, and when we train puppies which we have bred, we may educate them according to these principles.

It does not matter if farm dogs are heavy in the body and lack speed, because they should stay at their post close to home rather than running about over distances. They should always stay around the enclosures and among the farm buildings without wandering, and will fulfil their role well if they quickly scent any person approaching and bark to drive them off, and don't allow anyone to approach and violently attack anyone who does. Their primary task is not to let anyone approach, and to be strong and unremitting in punishing anyone who tries. This is as much as needs saying about farm dogs: let us now turn to herd dogs.

A sheepdog should not be as lean and fast as those which chase deer and stags and other fleet-footed animals, nor should it be as large and heavy as the dog which guards the farm and granaries; but nevertheless it should be strong and reasonably quick and vigorous, since it is acquired in order to quarrel and fight, and also to run, since it needs both to drive off attacks by wolves, and to chase after wild animals with their prey to make them drop it, and bring it back. For this reason its form should be more elongated and slimmer rather than short or stocky, since, as I have said, it is sometimes necessary for it to chase wild animals at speed. The rest of its conformation should be as for the guard dog.

The same food is recommended for both kinds of dog. If the fields are sufficiently widespread to sustain herds of cows, all dogs can be fed on barley flour with whey. If, however, the land is wooded without pasture, the dogs should be fed with bread of wheat or spelt, mixed with the liquor from boiled beans, but lukewarm; if hot liquor is used it causes rabies.

Neither male nor female dogs should be bred before they are a year old: if they breed while still young their bodily strength is weakened and their spirit degenerates. The first litter should be disposed of, since a first-time mother does not feed them properly, and rearing them hinders her overall growth and development. The males will reproduce enthusiastically until they are ten; after this point they do not seem suitable for mating, since the offspring of older dogs are slow and lazy. The bitches can pup until the age of nine, but are no longer useful after the tenth year. Puppies should not be let out for the first six months, while they are growing, except to play and sport with their mother. After this time they should be chained in the day and let loose at night. We should never

allow puppies whose noble spirit we wish to preserve, to be reared and fed by another bitch, since their mother's milk and spirit is most important to the formation of their body and mind. Therefore if a bitch does not have sufficient milk, it is best to rear the puppies on goat's milk until they are four months old.

The names given to dogs should not be too long, so that they can respond to them quickly when called, but they should not be shorter than two syllables, like, for example, the Greek name Scylax, the Latin Ferox, the Greek Lakon and the Latin Celer, or for bitches, the Greek names Spoudê, Alkê, Rhomê and the Latin Lupa, Cerva and Tigris.

....

In summer dogs' ears are often afflicted with sores made by flies, sometimes so badly that the whole ear is lost; to avoid this, the ears should be rubbed with ground bitter almonds. If the ear are already covered with sores, boiled liquid pitch mixed with lard should be dripped onto the wounds. Ticks can also be killed with the same treatment: they should not be picked off by hand, lest, as I noted above, this causes sores. Dogs which are flearidden can be treated with equal parts of powdered cumin and hellebore, mixed in water and rubbed on, or with the juice of the snake-like cucumber; if these are not available, the whole body can be doused with old lees of oil. If a dog has mange, grind together equal amounts of gypsum and sesame, mix them with liquid pitch and apply to the affected part: this treatment is also thought to be suitable for humans. If the mange becomes worse, it can be cured with cedar oil. Other diseases should be treated with the same remedies that we have advised for other animals.

COMMENT: Columella's handbook of agriculture, written in the first century BCE, makes clear the fundamental importance of the dog to the farmer. He dismisses hunting dogs as irrelevant to the work of the farm, but gives minute details of the choice, rearing and activities of the dogs which guard the farm buildings and the herds. His primary concern is protection rather than the management of stock: Columella lays great emphasis on the dangers of both human and animal depredation and so recommends that dogs be ferocious and barely controlled rather than familiar. The idea of the dog's importance to the farmer is echoed throughout classical writings, e.g. in Hesiod *Works and Days* 604–5: 'take good care of your sharp-toothed dog and do not grudge him his food, or else some day-sleeping thief may steal your property.' Varro, whose *De re rustica* II.9 contains similar advice about dogs for the farm, lays more emphasis on herd dogs; he recommends one dog per shepherd, or more if the flock is moving through woodland, while a flock on the farm can be managed by a pair of dogs. He also recommends that they be given collars studded with nail heads for protection against wolves and other beasts, examples of which can be seen in mosaics (Toynbee 1976). The list of suitable names for dogs appears in many writers: Xenophon *On Hunting* 7.5 lists forty-seven names, likewise of two syllables, and Ovid names thirty of the fifty hounds of Actaeon in *Metamorphoses* III.206–25. Most names refer to desirable qualities of the dog such as speed, beauty or strength: on the meaning of canine names see Rawlings (2011). It is noteworthy that Columella thinks that all dogs should be individually named; it was regular for pets and for hunting dogs (which need to be distinguishable within a pack), but here even guard dogs are accorded their own name.

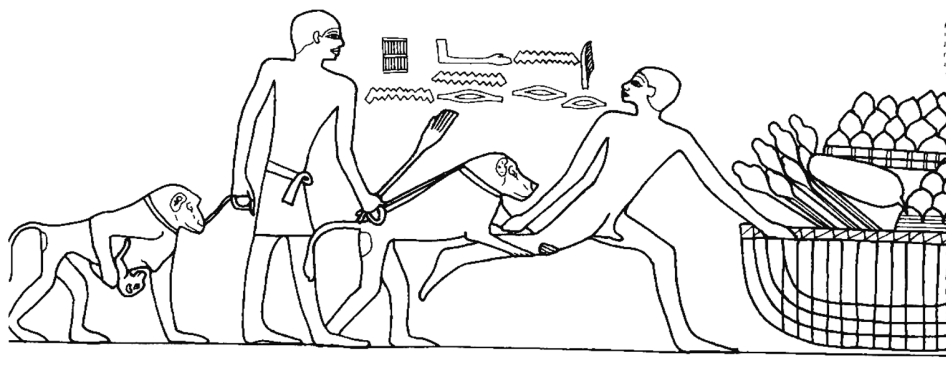
The list of remedies offered for diseases of dogs at the end of the passage is particularly interesting, not so much for the treatments themselves (though the treatment for fleas seems likely to be effective), but because it further indicates that the farm dog was considered on a par with other more valuable livestock, and even as a member of the household. Research on canine skeletal remains from Rome has shown that dogs in the Roman Mediterranean were generally healthy and long-lived, with veterinary intervention quite common (MacKinnon 2010a).

6. Working baboons

a) Relief from the tomb of Khunmhotep at Beni Hasan, XII Dynasty (after Janssen and Janssen 1989: 24)



b) Relief from the mastaba of Tepemankh, Saqqara, V Dynasty (after Janssen and Janssen 1989: 25, Houlihan 1996: 105)



COMMENT: Tame trained monkeys appear to have been used by Egyptian farmers to help collect dom-palm nuts, dates and grapes – although it is also possible that the baboons depicted in the tomb of Khunmhotep are wild animals, eating the luscious fruits and hindering rather than helping the fruit harvest (Janssen and Janssen 1989: 25).

It appears more certain, however, that monkeys were used as police-assistants. The image from the tomb of Tepemankh shows a truncheon-wielding officer whose baboons are assisting in the

capture of a thief. An accompanying hieroglyphic text reads, 'Fear for this baboon!' Baboons, especially full-grown males, can be ferocious and dangerous creatures and while the Egyptians were adept at taming a wide range of wild animals (including misguided attempts to domesticate hyenas – see HYENA no. 3), they knew that the behaviour of male baboons could be unpredictable. In fact, the hieroglyphic determinative for the word 'aggression' was a baboon. It seems that male baboons were better suited to employment which exploited their instincts rather than to being kept as pets.

TRANSPORT

7. Draught oxen in Roman Britain

*Cattle leg and foot bones from Binchester Roman Fort
(photograph by kind permission of Dr Cameron Clegg)*



COMMENT: Zooarchaeology is one of the most direct methods of understanding animal lives in the past. Examining the skeletal remains of animals can tell us a great deal not only about their geographical spread and exploitation by humans, but also about their experiences while alive. Domestic animals in particular have been extensively studied, and the zooarchaeology of cattle, especially in the Roman empire, has been revealing (Mackinnon 2004, 2010b). Bone evidence can tell us the size and sex of the animals at a particular site, the conditions in which they lived and worked, their age at slaughter and their treatment after death, allowing us to reconstruct the profile of herds, determine their agricultural or other purpose, and detect changes over time. Under the Romans, for instance, cattle increased in size, first in Italy and then across the provinces: the reasons for this may be to do with the spread of better stock and feeding regimes, but may also represent a changing preference from larger numbers of small cattle (wealth by number) to smaller numbers of large animals (wealth by quality) (MacKinnon 2004: 92; 2010b: 70–1).

Oxen were the heavy draught animals of the Roman empire, drawing carts, wagons and even barges (Procop. *Wars* V.26.12), and also of the army, hauling supplies and military equipment (Toynbee 2013: 161–2). The two cattle foot bones illustrated above come from the site of Binchester in Roman Britain, a military fort, and form part of an assemblage studied by Clegg (2015) to investigate the lived experience of cattle on the site. These specimens display two kinds of pathology: on the left is a pair of tarsals which have fused together with arthritic growths, and on the right a metatarsal which shows signs of trauma leading to deformity. Both these features are consistent with lameness caused by persistent hard work at haulage, revealing the often brutal nature of oxen's work in antiquity.

8. Donkey-work

a) Egyptian hieratic ostraca, mid to late New Kingdom, from Deir el-Medina (after McDowell 1999: 86–90)

i) Donkey rental

Year 3, second month of winter day 1. This day, giving the donkey for hire to the policeman Amen-kha: makes 5 copper deben for the month. And it spent 42 days with him. [. . .]

ii) Breaking a lease rental

(recto) Year 1, third month of inundation, day 3. Giving the donkey of the (work)man Menna to the water-carrier Raiay for hire up to today, although it does not amount to 4 months, total 120 days. Seizing the donkey in the first month of winter, day 15. Taking it again on the third month of winter, day 6 [. . .]

(verso) Received from him:

Straw

1 *menet*-jar of salt

40 handfuls of hay

1 donkey-load of dung

Again, 2 donkey-loads of wood

Year 1, second month of winter, day 8. Giving him the donkey for ploughing.

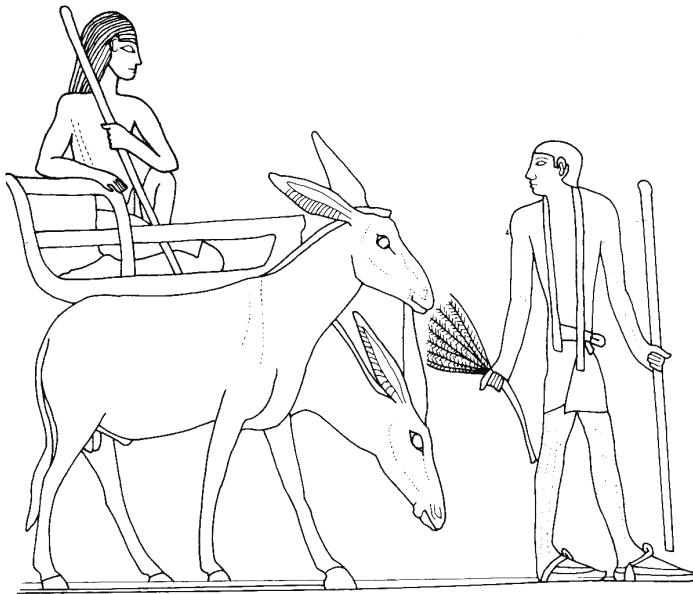
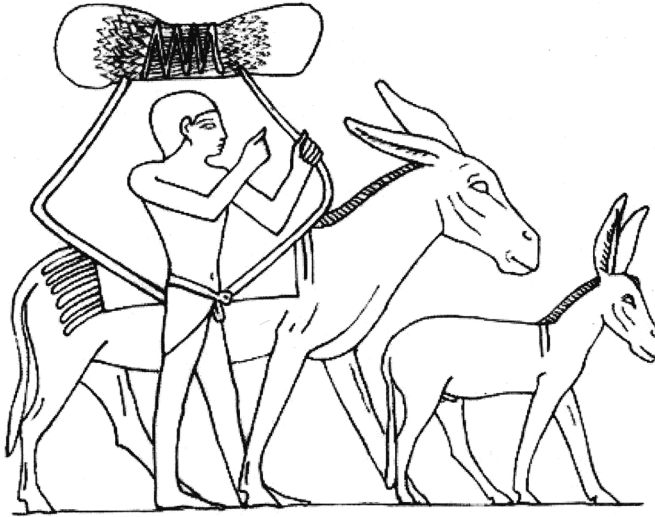
iii) Borrowing a donkey

Hearing the testimony of the workman Pre-hotep, as follows: 'As for me, my donkey was handed over to my free-woman and I went up (to the Valley of the Kings) for three days. When I came back in the evening, she said to me, "I have left the donkey outside." Now when I went to lock it up in the evening, I found it in the possession of Kel, loaded with emmer. I said to him, "Who gave you that donkey?" He said, "I found him wandering about, and I took it to bring this grain job to the Enclosure of the Necropolis." I seized it, and he said to me, "Do not seize it! I will give you this other [. . .] for it!" And I [. . .] One agreed [. . .] and he gave [. . .] And I gave the donkey to his [. . .] seized [. . .]'

iv) Death of a borrowed donkey

Year 31, fourth month, day 17. Giving the donkey to Hori . . . he was brought up. [. . .] spent the night [. . .] he died, although his hire was not complete. . .

b) Old Kingdom wall reliefs from the V Dynasty tombs of Pahensy and Ninankhkhnum from Saqqara (after Janssen and Janssen 1989: 38)

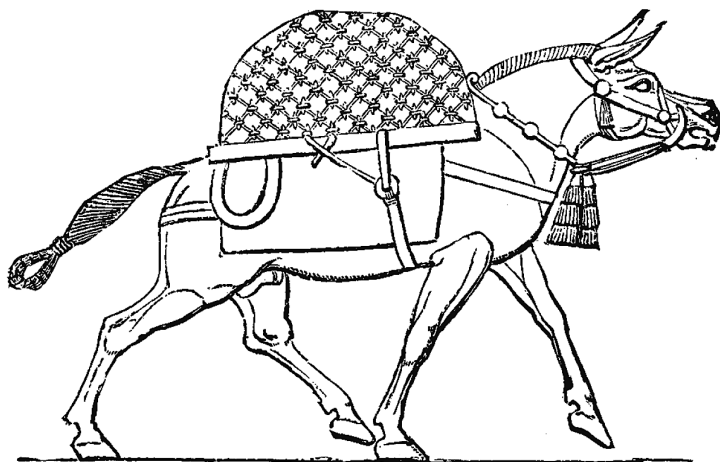


COMMENT: Numerous tomb paintings show donkeys, with saddle pack and baskets on their backs, being used for transportation. They were also used for threshing the fields and for the transportation of individuals. Evidence for the use of donkeys as draught animals is less clear to find but it is quite possible that plough-donkeys existed. They were certainly used for transporting humans – several scenes represent donkeys bringing farm-owners to the fields in elaborate palanquins.

Many ostraca from the New Kingdom workmen's village of Deir el-Medina focus on the trading, renting and borrowing of donkeys (Egyptian, *ceyore*). It is fair to say that the donkey economy of the village was one of the most healthy, since donkeys were expensive animals (with the sale cost on average being twenty to forty *deben*) and were in constant demand. The ostraca show that donkeys were regularly rented out for labour – usually to water-carriers and wood-cutters (but even to policemen) – and that the length of lease varied from a few days to three or four months (see McDowell 1999: 85–90 and Eyre 2013: 110–13). Complications with the transactions could occur, such as the occasion of an animal's untimely death. Donkey-breeding was systematically undertaken throughout Egypt, since having a constant supply of healthy donkeys meant that agriculture, trade and the economy could prosper. A well-maintained donkey could live up to forty years or more, although the Deir el-Medina texts do speak of animals' early deaths, including that of one donkey who died because it was too 'hot' – possibly a reference to a high fever (Janssen and Janssen 1989: 37).

9. Assyrian baggage mule

*Line drawing taken from an Assyrian wall relief from
Ashurbanipal's North Palace, Nineveh, c. 645–635 BCE
(London, British Museum ME 124896–124898)*



COMMENT: The Assyrian imperial communication network relied on mounted messengers and the exclusive transport animal used for this purpose was the mule (Akkadian, *kūdumu*), always employed in pairs – a strategy intended to reduce the chance of a rider ever being left stranded with a lame animal. The administrative title 'Man of the Mule House' is attested for high-ranking officials at the Neo-Assyrian court who were responsible for overseeing the imperial communications system (similar titles, 'Scribe of the Mule House' and 'Charioteer of the Mule House', are

attested in the Hittite courts too; Weeden 2014: 55). Utilising mounted messengers was a costly business and ‘necessitated a substantial involvement of the state and thus indicates the centralized underpinnings of the organization of the state communications’ (Weeden 2014: 56).

Offspring of a mare and a donkey jack, mules mature five years later than both parent animals but have a longer working life of up to twenty years. Physically they combine the body of a horse with the extremities of a donkey and often grow taller than both parents. Importantly, maintaining the feet of a mule requires substantially less time and care than that of a horse. As hybrids, mules are always infertile and this is the subject of a devastating Assyrian curse: ‘Just as a mule has no offspring, may your name, your seed, and the seed of your sons and your daughters disappear from the land’ (State Archives of Assyria 2.6: 537–9). In addition to the mule’s slower physical development and the need for extensive (yet sensitive) training, its infertility makes it a very expensive initial investment. In an Assyrian debt note from c. 670 BCE (State Archives of Assyria 6. 206), the return of a mule to the army commander who was responsible for it is guaranteed with the extraordinarily high penalty payment of thirty *minas* of silver, compared to the average price for a slave of just under one *mina*.

How the Assyrian state procured the mules and whether they were purpose-bred, bought or captured is unknown (see HORSE no. 6b). The necessary early expenses were in any case easily offset by the fact that mules are stronger and more resilient than horses while nevertheless sharing the donkey’s sure-footedness and instinct for self-preservation; mules are also very good swimmers. While the Assyrian state is the first in world history to have realised the potential of mules for its purposes, texts occasionally show how very straining the work could be for the animals. In one letter to Sargon, an imperial envoy who found himself insufficiently provisioned with mules when travelling across the Qara Dagħ mountain range complains, ‘The king, my lord, knows that Arzuhina is situated at a crossroads; the stage from Arzuhina to Arrakdi is a strain for the animals. The king, my lord, should give orders that a mule-express be stationed in Dur-Atanate, so we can strengthen each other’ (State Archives of Assyria 5. 227).

10. Camels working in the diplomatic and postal services

Hebrew bible, Esther 8.10

Mordecai wrote in the name of King Ahasuerus and sealed it with the king’s signet ring. He then sent letters by couriers on horses, and riders on mules, camels and young dromedaries.

COMMENTS: The smooth running of the Persian empire was facilitated by an excellent infrastructure. While first-rate roads connected all of the main satrapal centres with the imperial core, the most important of these highways was undoubtedly the Royal Road which connected Sardis to Persepolis, via Susa and Babylon; an eastern branch led first to Ecbatana and thence onwards to Bactra and Pashwar, while another road connected Persepolis to Egypt via Damascus and Jerusalem. The roads were measured in six-kilometre intervals (*parasangs*) and road-stations were set up around every twenty-eight kilometres of the route to accommodate the quick change of fresh horses, dromedaries or camels for any imperial messenger carrying official mail. Dromedaries were prized for their speed and stamina; they were the race horses of the desert world and could cover as much as thirteen to sixteen kilometres (eight to ten miles) an hour. Herodotus (V.53) estimated that the distance from Susa to Sardis, 450 *parasangs*, could be covered on horse in ninety days, but it is possible that a dromedary-relay could cover the same distance in less time. When the Macedonians invaded Persia under Alexander the Great, they were quick

to take advantage of the communication systems they found: according to Diodorus, when Alexander executed his general Philotas and then ordered the death of Philotas' father Parmenio, he sent his execution squad to Parmenio's camp on dromedaries to ensure that they arrived before the news of his son's death could alert Parmenio to his danger (XVII.80.3).

Camels, in contrast, are mainly attested on the ancient caravan tracks, which were rough and unpaved but nevertheless wide enough to transport armies and merchant trains; these criss-crossed the entire landscape, so that camels too were part of Persia's communication infrastructure (on the caravan tracks see Hdt. VIII. 83; Xen. *Cyr.* VI.2.165; Diod. XVIII. 26; Ar. *Ach.* 68–71).

11. Inscription from Ostia for the overseer of the camels

Ostia Museum 1029 (after Kolendo 1969)

DIS. MANIBUS
T. FLAVI. AUG. LIB.
STEPHANI
PRAEPOSITO
CAMELLORUM

COMMENTS: This intriguing inscription is an epitaph from the necropolis at the Roman port of Ostia, commemorating Tiberius Flavius Stephanus, an imperial freedman under the Flavian emperors in the first century CE, whose role was *praepositus camellorum*, overseer of the camels. The plaque is decorated with rather unskilled drawings of two camels (dromedaries) and an elephant.

Flavius Stephanus was plainly an official in the emperor's employment, but the nature of his role has provoked considerable discussion. A number of similar inscriptions are known which commemorate imperial freedmen in charge of various types of wild animal, clearly beasts for the arena. One Tiberius Claudius Speclator is named as 'procurator of the elephants' at Laurentum (= ELEPHANT no. 9), and Stephanus' role has been linked to this, with the suggestion that he was overseer of the camels at the imperial *vivarium* (stockyard) on the outskirts of Rome where beasts were kept in preparation for the games. The assumption that camels were a regular arena entertainment, however, is hard to support from the evidence: the references we have to *venationes* including camels are few (Dio LX.7.3; Suet. *Nero* 11.1; SHA *Elag.* 23.1), hardly comparable to the enthusiasm for lions, leopards and bears. Even the *vivaria* themselves have proved difficult to detect archaeologically, with no significant deposits of exotic animal bones so far discovered (MacKinnon 2006).

An alternative suggestion is that Flavius Stephanus was in charge of camels as working beasts, either in North Africa where they were very common, or in Ostia itself. Camel bones have been found in Ostia in very small numbers (de Grossi Mazzorin 2006), and as a port the need for the transport of goods was essential; Pliny makes an interesting aside when discussing the medicinal use of camel products, saying that camel's urine was particularly valued by fullers (NH 28.91), perhaps implying that one might expect to find such a thing close to hand. It seems possible that the *praepositus camellorum* may have been an overseer of working animals rather than a stockyard keeper.

PERFORMING ANIMALS

12. A performing monkey writes home

Old Babylonian scribal text, c. 2000–1600 BCE (after Powell 1978; Cohen 1976; Dunham 1985)

The Monkey Ugubi to Mother:

Ur is the City-Resplendent of Nanna. In Eridu, the City-Abundant of Enki, I am locked behind the door of the house of the Chief Musician. I'm being fed on nothing but offal. Don't let me die of hunger for fresh bread and fresh beer! Send me some by diplomatic post!

The situation is desperate!

COMMENT: This lively text, written 'purely for amusement' (Barnett 1973: 3), was probably composed as a literary exercise to be used in scribal training – a little light relief from copying more serious scholarly compositions. The text takes the form of a letter written by a caged monkey named Ugubi to his mother: Ugubi is captive in the house of a musician and is slowly starving for lack of adequate food.

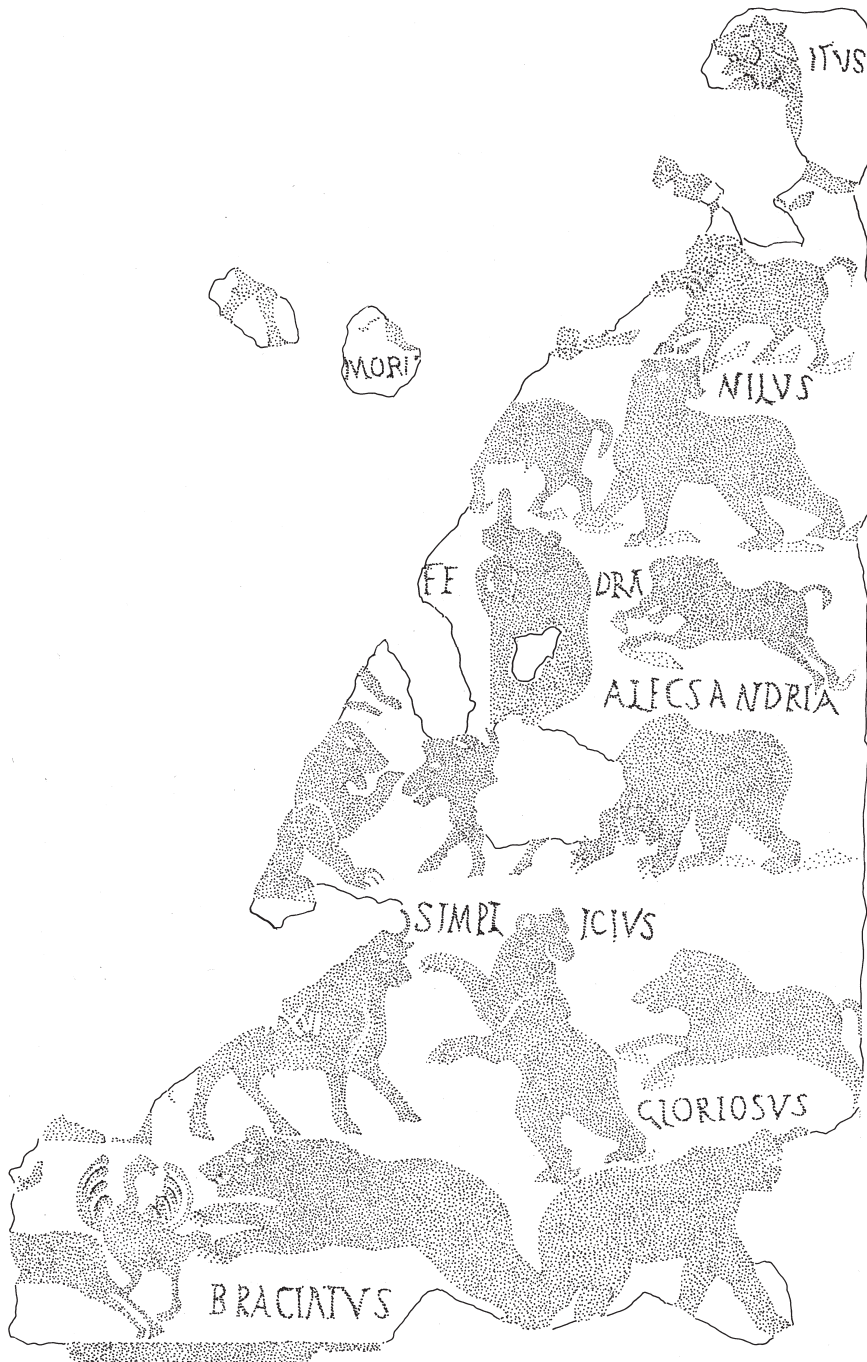
What might the 'monkey letter' mean? The Sumerian word *ugubi* corresponds to the Akkadian *pagu*, which has the double meaning of 'monkey' and 'musical instrument'; this is an obvious connection because the Near Eastern evidence for monkeys being used as dancers in popular entertainment is plentiful. A terracotta plaque dating to c. 1850–1750 BCE, for instance, depicts entertainers at a festival – two naked women accompanied by dwarves playing the lute, and three monkeys wearing harnesses (Collon 2003: 99). Many other images depict monkeys playing flutes or harps – clearly imaginary scenarios (perhaps related to fables), but nonetheless indicative of the monkey's role as entertainer. Significantly, in a recently discovered fragment of the Gilgamesh episode (Al-Rawi and George 2014: 77), the screeching monkeys within a dense cedar forests are likened to a band of musicians:

[Through] all the forest a bird began to sing:
[. . .] were answering one another, a constant din was the noise,
[A solitary(?)] tree-cricket set off a noisy chorus,
[. . .] were singing a song, making the . . . pipe loud.
A wood pigeon was moaning, a turtle dove calling in answer.
At the call of] the stork, the forest exults,
[at the cry of] the francolin, the forest exults in plenty.
[Monkey mothers] sing aloud, a youngster monkey shrieks:
[like a band(?)] of musicians and drummers. . .

The evidence suggests that monkeys were worked in ways similar to the performing monkeys still seen in today's India. Given the probability that monkeys were imported from India, perhaps the tradition of the Monkey-*Wallah* was adopted in Mesopotamia too (Greenlaw 2011: 37). In the case of Ugubi, the hero of the 'monkey letter', it is his misfortune to be in the service of a negligent, possibly cruel, Monkey-*Wallah*.

13. A troupe of performing bears

Mosaic, Bardo Museum, from Rades, c. 300 CE (drawing by Tessa Rickards)



COMMENT: The bear was the most common creature displayed in the Roman arena: its accessibility combined with its irascible temperament meant that huge numbers of bears were hunted in the north of the empire and transported to Italy for the games. In provincial amphitheatres for which African or Indian animals were too expensive, bears would be the principal wild predator shown (Jennison 1937/2005: 43). To feed the demand, inscriptions show that the army along the Rhine played a large role in hunting bears, and some legions had professional *ursarii* (bear-hunters) attached to them (*CIL* XII.533, XIII.2717, 5243, 8639). The pitting of bear against human fighter or against other animals, however, was not the only form of entertainment: mosaics like this North African example attest to the appearance of performing bears. In this example the bears depicted fighting boars and bulls are named individuals: Braciatus, Gloriosus, Simplicius, Alicsandria and Nilus. Fedra, in the centre, climbs a pole as an acrobatic turn. Dunbabin suggests that the mosaic commemorates a particular show given by the owner of the house, with 'a troupe of famous bears' (1978: 73), and such commemoration appears to be a North African phenomenon: a mosaic from Curubis depicts seven named bears, including Leander and Invictus, while another from Carthage shows the bears Crudelis and Omicida with two *venatores* (Dunbabin 1978: 73). The naming of the bears raises the interesting question of where performance ended: a trained bear would be too valuable for simple slaughter, and perhaps there was an element of staged fighting. A graffito from Pompeii which advertises as a special attraction a *venator* called Felix who will fight bears is perhaps an example of this (*CIL* IV.1989; see also LEOPARD no. 5). Individual performing bears, so common in Europe in the Middle Ages, also seem to have existed in the Roman empire: gems and reliefs show the process of training, and literary sources refer to bears in costume or performing pantomime (Toynbee 2013: 96–7).

14. An elephant show at Rome

Aelian On the Nature of Animals II.11

When tamed the elephant is very gentle and easily follows instructions. And, as time permits, I will begin with the earliest examples. Germanicus Caesar, the nephew of Tiberius, put on a show at Rome. There were several male and female elephants in Rome at that time, fully-grown, and some calves which had been born in Italy. When they were steady on their feet, a man experienced in dealing with elephants trained them, managing them with amazing and almost uncanny skill. He introduced them calmly and gently to his training, tempting them with delicacies and all their favourite foods, so as to bring them gradually to abandon their wild ways and voluntarily become tame, indeed almost human. They learned not to be maddened by the sound of the *aulos*, or startled by the beating of drums, to be charmed by the pipe and not alarmed by discordant notes, the sound of marching feet or voices raised in song. Most importantly, they learned not to be afraid of crowds. Other of their instructions endowed them with human-like virtues: not to become angry when they received a blow, and, when made to bend their limbs and execute dance steps, to restrain their temper, despite their great strength and power. . . . The troop of elephants was twelve altogether, and they entered the theatre six on each side, walking with a delicate gait and swaying their bodies gently, wearing flowered garments like dancers. And guided only by their trainer's voice, it seems, they formed a line or wheeled in a circle or turned about, according to each instruction. And they strewed flowers to decorate the arena, moderately and decorously, and sometimes stamped their feet, keeping time together in a dance. . . . But what followed filled the spectators with delight. On the sand of the arena were placed low

couches with cushions, spread with embroidered covers . . . Alongside were set expensive cups and gold and silver bowls full of water, and exquisite tables of sandalwood and ivory laid with a meal of meat and bread enough to satisfy the most voracious appetite. When all was prepared the banqueters entered, six male and six female, wearing clothes appropriate to their gender, and they lay down to eat in an orderly way, in pairs of male and female. On a signal they reached out decorously with their trunks, as with hands, and ate most deftly. . . .

When they wanted to drink a bowl was set by each elephant, and sucking up the water with their trunks they drank very neatly, and then playfully squirted it [at each other?].

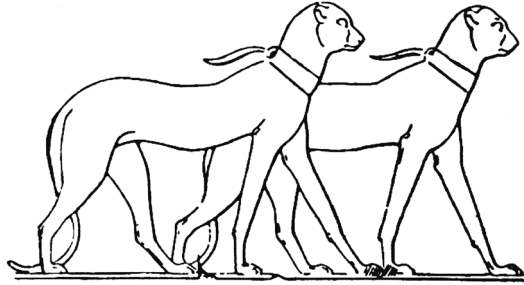
Many other accounts have been written about the amazing intelligence of the elephant: I myself have seen one writing Latin letters on a tablet with its trunk in a neat straight line, except that its trainer's hand was there to guide it. The elephant looked intently at its task, and you would have said that it had been taught to know its letters.

COMMENT: The domestication of elephants of course had a long tradition in India, and as the elephant spread across the Mediterranean Indian mahouts were at first brought with them (reflected in Aelian's comment about an elephant that understood Greek as well as Indian (*NA* XI.25)). It is therefore not the training of elephants as performers which is striking in itself, but rather the shift we see in Roman preferences from the killing of elephants in the arena to presenting them as performers in non-lethal shows. Early on elephants were killed in the arena, but Pliny (*NH* VIII.7) famously records the discomfort of the crowd at Pompey's games in 55 BC when the suffering of the elephants as they were hunted and killed was felt to be too human for comfort, and after the Republican period the number of elephants deliberately slaughtered was relatively small, though they did still fight other animals: Martial *Spect.* 17 describes a combat between bull and elephant, and pitting rhino and elephant was also notable (see Scullard 1974: pl. XVII). The lengthy and expensive training outlined above, however, indicates that their value as performers outweighed that as hunted beast: Pliny (*NH* VIII.2–3) gives a similar description of performing elephants, adding that they could throw weapons, engage in mock-gladiatorial fights, walk on tightropes and write letters, and under the empire the tightrope-walking elephant became something of a favourite (Dio LXI.17; Suet. *Nero* 11.2; *Galba* 6.1). Shelton (2004) argues that we should not see an element of compassion in the preference for performing elephants, but rather that both lethal and non-lethal shows involved human domination and humiliation of the great animal. Some sources, however, seem to carry a more affectionate note: the emperor Augustus famously encouraged a timid petitioner who was nervous about presenting his plea by comparing him to someone 'giving an *as* (penny) to an elephant' (Suet. *Iul.* 53.2), and the proverbial form of the comparison implies elephants trained to accept gifts from onlookers.

HUNTING

15. Tame hunting-cheetahs with collars

Line drawing of a relief from Deir-el Bahri, Thebes, Egypt, reign of Hatshepsut (after Naville 1923, vol III, pl. lxxx)



COMMENT: The cheetah is surprisingly easy to tame and train for the hunt (Allsen 2006: 82; Castel 2002; Humphreys and Kahrom 1995). Hunting with tamed cheetahs may have started in Egypt (the Deir-el Bahri relief is the earliest evidence for the animal wearing a collar and leash) and thereafter spread to Mesopotamia, though it is possible that hunting cheetahs were already known in the Near East from Sumerian times, having been imported as luxury items from India via Iran (see CHEETAH no. 2). Certainly classical evidence attests to the popularity of cheetahs used for hunting in royal India (Aelian NA XV.14, XVII.26) and the Persian epic *Shahnameh* preserves traditions of Sasanian monarchs hunting with cheetahs.

16. Falconry

*a) Stela of Tarhunpiyas, from Gurgum, Anatolia, c. 850–800 BCE
(Paris, Louvre AO 19222)*



***b) Ugaritic literary text, fourteenth century BCE, the
Story of Aqhat 1.18 iv 30–45 (Wyatt 1998: 286)***

[Ishtar] took Yatipan the mercenary warrior;
she placed him as a falcon on her gauntlet,
as a hawk on her glove.
As Aqhat sat down to ea[t],
the son of Danel to feed,
above him some falcons hovered
a flock of hawks was watching.
[Among] the falcons Anat hovered,
above [Aqhat] she placed him.
He hit him twice on the skull,
three times above the ear.
He poured out his blood [like] a murderer,
like a slaughterer (he brought him) to his knees.
His life-breath went out like the wind,
[like spittle] his vitality,
as (his) dying breath from his nostrils.
Anat watched as his pulse stopped,
[she looked on as] Aqhat [died],
and she wept for the ch[ild of Danel]:
'I understand that it was on account of your b[ow that I smote you],
[and because of] your arrows that I did not let you live!'
And the birds disappeared.

c) Akkadian omina text (after Bodenheimer 1960: 95)

When . . . , the king will assemble his army and will reach the enemy.
When . . . , and the falcon reaches his prey, and he passes the king from his right to his
left, the king will complete his purpose, wherever he goes.
When . . . and the falcon reaches his prey, carries off this prey and flies before the king,
he will complete his purpose.
When . . . and the falcon reaches his prey, he flies towards the king and drops his prey,
the enemy will retire and make peace.
When . . . and the falcon reaches his prey and drops it behind the king, he will not be
successful, wherever he goes.
When . . . and the falcon reaches his prey and he circles around the king, his enemy
will pierce the town-gate before him he will show clemency and the people of the
country will be blessed.
When . . . and the falcon reaches his prey and tears it to pieces with his beak, and
flies from the king, the king will be successful wherever he goes and rules his
enemies.
When . . . the falcon reaches his prey and carries away in his beak away from the king,
the king will be successful wherever he goes and rule his enemies.
When . . . a falcon and a raven fight together before the king and the falcon kills the
raven, the army of the king will prevail over the might of the enemy, he will take
the town of the enemy and live there in peace.

When . . . and a falcon and a raven fight together before the king and the raven kills the falcon, the army of the enemy will prevail, it will take the menaced town of the king and live there in peace.

COMMENT: The style and imagery of the Tarhunpiyas stela link it to the city of Marash (ancient Gurgum), a Neo-Hittite state in south-eastern Anatolia. Prince Tarhunpiyas, represented as a grown child, stands on his mother's knees. Both are richly dressed and the objects close to the prince – the writing tablet with stylus and the hunting bird – allude to courtly pleasures. In his left hand, the royal child holds a short leash (or *jesse*) which is fastened to the bird's foot with a *bewit* (which attaches a bell to the leash). The bird is most probably a falcon (although a goshawk, a raptor widely found between Turkey and India, has been suggested too). The Marash stela is one of the oldest known images of falconry.

Hunting with hawks was probably practiced in the Asiatic steppes as early as the second millennium BCE, and entered the Near East in the first millennium (Serjeantson 2009: 320; MacDonald 2006: 69–105). Hunting with falcons, as with cheetahs, was a costly pastime and available only to the wealthy ruling classes, who employed falconers and hawkers to support their privileged hobby. The association between the falcon and royalty is stressed not only in Egyptian society (where the pharaoh was regarded as an incarnation of the falcon god Horus) but in Near Eastern bird *omina* (c above) where falcon omens are favourable to kings and princes, but unfavourable to foreigners and commoners.

The Hittites were certainly familiar with falconry and the elite sport is represented on seals and reliefs with some regularity (Vorys Canby 2002). An incised relief on a silver *rhylon* (see DEER no. 1) shows a god and goddess holding falcons in their left hands. Occasional references in Hittite texts to the ritual consecration or dedication of a wild falcon to a deity suggest their symbolic importance. This is true too of the bird's relationship with Mesopotamian deities. One text notes that, 'the falcon is the bird of Marduk; it continually cries: "*Sazû*", [because it is] the one who knows (*ZU*) the heart (*SA*) of the gods, who looks into (men's) minds' (*Enuma Eliš* vii: 35). In the Ugarit ritual text above (b), the goddess Anat takes the form of a falcon and the poet describes with breathless force the falcon's hunting behaviour as it strikes its airborne victim's head with its talons. After all, as an Egyptian Coffin Text (Spell 80) reminds us: 'falcons live off [other] birds'.

There are hints that falconry was practiced in Thrace (see FALCON/HAWK no. 3) and also in Persia: an Achaemenid-period blue-glazed tile found at Persepolis, believed to be a representation of a banner, depicts a falcon with its wings spread wide (Sami 1970: 100).

In the Sasanian period, falconry books known as *Bas-nameh* became popular among the elite. The Persian word *basbas*, an Achaemenid-period term for a rare or sporting bird, especially for fighting cocks (see CHICKEN no. 4 and PEACOCK no. 2), morphed into *baz* and was used to refer to the sporting falcon by the Sasanian elite (Hüe and Etchécopar 1970). The Babylonian Talmud contains a word, *shakarbazay*, which seems to mean 'to hunt with falcons' (Allsen 2006: 67); the text provides evidence that the Sasanian Persians used the Middle Iranian term *bayzar*, 'falconer', for individuals who trained and handled the bird (Mokhtarian forthcoming: 61–2; see also Daryae and Malekzadeh forthcoming).

WARFARE

17. War elephants at the battle of the Hydaspes

Diodorus XVII.87–89.2

In this year [326/5] Alexander gathered his army in the country of Taxiles and launched a campaign of conquest against Porus, king of the neighbouring Indians. Porus' army comprised more than fifty thousand infantry, about three thousand cavalry, more than a thousand chariots and 130 elephants. He also had as ally another of the local kings, Embisaros, who commanded an army little smaller than Porus'.

Alexander, learning that Embisaros was still forty stades away, decided to attack Porus before he arrived. As he approached Porus realised that his enemy was near, and straight away drew up his army with the cavalry on the wings and the elephants, equipped so as to strike fear into the enemy, stationed at regular intervals along the line. He placed the rest of his footsoldiers in between the elephants so that they could help the beasts and prevent their being struck by javelins from the sides. His whole army drawn up had the appearance of a city, with the elephants rising up like towers and the soldiers between them like the walls. Alexander arranged his own forces as appropriate to the enemy disposition.

When battle was joined the Indians' chariots were almost all destroyed by the cavalry, then the elephants attacked, using their great size and strength. Some of the Macedonians were trampled by the animals and died, bones broken despite their armour, while others were picked up in the elephants' trunks and hurled to the ground, falling to a fearful death, and many others were gored by the elephants' tusks and died instantly, their bodies laid open. Nevertheless the Macedonians retained their courage in this terrifying situation, and wielding their sarissas against the troops between the elephants, they kept the fighting even. Eventually the elephants began to suffer from javelin wounds, and maddened by the pain, began to ignore their mahouts' instructions. They turned upon their own troops in an uncontrollable panic and trampled men from their own side.

In this confusion Porus saw what was happening and, mounted as he was on the largest of all the elephants, he gathered round him another forty which were still under control and threw their combined weight against the enemy, killing a great many. . . . The Macedonians who faced him were astonished at his prowess, but Alexander ordered the archers and slingers to concentrate their attacks on Porus himself. They swiftly obeyed, and a shower of missiles rained down on Porus, all hitting their mark because of his great size. He continued to fight bravely until loss of blood from his wounds caused him to faint, and he collapsed on his elephant, then fell to the ground. The report rapidly spread that the king had been killed, and the rest of the Indian forces fled.

Great slaughter ensued in the pursuit until Alexander, clearly the victor, sounded the trumpets to recall his troops. More than twelve hundred Indians were killed in the battle, including Porus' two sons together with the generals and most distinguished officers. About nine thousand men were taken prisoner, and eighty elephants. Porus himself, still breathing, was handed over to the Indians for medical treatment.

COMMENT: Elephants became known in the Greek world for the first time when Alexander the Great invaded the Persian Empire and reached India: they were introduced to them not as wild animals but as useful domesticates, and the Macedonians were particularly struck by their

use in warfare. Alexander's battle at the River Hydaspes against the Indian king Porus was the first time that a Macedonian army faced trained war elephants, and the account dwells on the sheer terror of facing a line of elephants as a foot-soldier. Alexander's men had seen elephants before, and had even captured some belonging to the Persians (Arr. *Anab.* III.15.4, IV.27.9), but had not had to confront the line of huge trampling and goring beasts. The impression which the elephants made is illustrated on a well-known silver decadrachm minted in Babylon after the battle, showing the tiny figure of Alexander on a horse attacking Porus on his much larger elephant (Toynbee 2013: fig. 3; Scullard 1974: pl. XIIIb). Nevertheless, foot-soldiers with sarissas and javelins were ultimately able to defeat them, and Alexander himself, though he retained an elephant corps, did not use them in warfare, presumably because they could not easily be integrated into his army. His Successors, however, inherited Alexander's elephants and used them in battle, and they became a significant factor in Hellenistic warfare (Epplert 2007). The kings went to great lengths to secure sufficient numbers: Seleucus exchanged all his lands beyond the Indus for 500 trained elephants (Strabo *Geog.* XV.2.9), while the Ptolemies embarked on a programme of capturing and training African forest elephants from Ethiopia to create a home-grown elephant corps, using Indian trainers (Diod. III.36.3; Casson 1993).

The passage also describes one of the main problems of elephant behaviour in battle, mentioned in almost every account: their tendency to panic when frightened or injured and become a danger to both sides. It is hardly surprising that sensitive animals like elephants would panic when injured or alarmed; Livy (XXVII.49) records that the Carthaginians later resorted to the gruesome practice of issuing their elephant-riders with a chisel and mallet, to be used to kill their elephant if it ran amok. Nevertheless elephants remained a mainstay of Hellenistic and Carthaginian armies until the conquest of Rome (Epplert 2007).

Bibliography

- T. Allsen, *The Royal Hunt In Eurasian History* (Pennsylvania 2006).
 F.N.H. Al-Rawi and A. R. George, 'Back to the cedar forest: the beginning and end of Tablet V of the *Standard Babylonian Epic of Gilgamesh*', *Journal of Cuneiform Studies* 66 (2014), 69–90.
 R.D. Barnett, 'Monkey business', *Journal of Ancient Near Eastern Studies* 5 (1973), 1–10.
 F.S. Bodenheimer, *Animal and Man in Bible Lands* (Leiden 1960).
 T. Bryce, *Life and Society in the Hittite World* (Oxford 2012).
 L. Casson, 'Ptolemy II and the hunting of African elephants', *TAPA* 123 (1993), 247–60.
 E. Castel, 'Panthers, leopards and cheetahs. Notes on identification', *Trabajos de Egiptología* 1 (2002), 17–28.
 C.B. Clegg, *The Bones at Binchester: a zooarchaeological analysis of cattle from a late Roman military fort and civilian settlement in northern England*, PhD thesis (Durham 2015).
 M.E. Cohen, 'The "Monkey Letter": a different perspective', *Orientalia* 45 (1976), 270–4.
 D. Collon, 'Dance in ancient Mesopotamia', *Near Eastern Archaeology* 66.3 (2003), 96–102.
 K. Coulter, *Animals, Work and the Promise of Interspecies Solidarity* (New York 2016).
 T. Daryae and S. Malekzadeh, 'Falcons and falconry in pre-modern Persia', in K.-H. Gersmann and O. Grimm (eds.), *Pre-Modern Falconry and Bird-Symbolism* (Leiden forthcoming).
 K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
 S. Dunham, 'The monkey in the middle', *Zeitschrift für Assyriologie* 75 (1985), 234–64.
 C. Epplert, 'War elephants in the Hellenistic world', in W. Heckel, L.A. Tritle and P.V. Wheatley (eds.), *Alexander's Empire: formulation to decay* (Claremont, CA 2007), 209–32.
 C. Eyre, *The Use of Documents in Pharaonic Egypt* (Oxford 2013).
 C. Greenlaw, *The Representation of Monkeys in the Art and Thought of Mediterranean Cultures. A New Perspective on Ancient Primates* (Oxford 2011).
 J. de Grossi Mazzorin, 'Cammeli nell'antichità: le presenze in Italia', *Archaeozoological Studies in Honour of A. Riedel* (Bolzano 2006), 231–42.
 B.L. Hijmans, R. Th. van der Paardt, V. Schmidt, B. Wesseling and M. Zimmerman, *Apuleius Madaurensis Metamorphoses Book IX: Text, Introduction, and Commentary* (Groningen 1995).

- H.A. Hoffner, *The Laws of the Hittites. A Critical Edition* (Leiden 1997).
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- F. Hüe and R.D. Etchécopar, *Les oiseaux du Proche et du Moyen Orient* (Paris 1970).
- P.N. Humphreys and E. Kahrom, *The Lion and the Gazelle. The Mammals and Birds of Iran* (Abergavenny 1995).
- S. Hurn, *Humans and Other Animals: cross-cultural perspectives on human–animal interactions* (London 2012).
- T. Ingold, 'From trust to domination: an alternative history of human–animal relations', in A. Manning and J. Serpell (eds), *Animals and Human Society: changing perspectives* (London 1994), 1–22.
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
- O. Keel, *The Symbolism of the Biblical World. Ancient Near Eastern Iconography and the Book of Psalms* (New York 1978).
- A. King, 'Mammals: evidence from wall paintings, sculpture, mosaics, faunal remains and ancient literary sources', in W.F. Jashemski and E.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 401–50.
- J. Kolendo, 'Épigraphie et archéologie: le *praepositus camellorum* dans une inscription d'Ostie', *Klio* 51 (1969), 287–98.
- S. Lewis, 'A lifetime together? Temporal perspectives on animal–human interactions', in T. Foegen and E.V. Thomas (eds), *Interactions between Humans and Animals in Graeco-Roman Antiquity* (Berlin 2017).
- H. MacDonald, *Falcon* (London 2006).
- M. MacKinnon, *Production and Consumption of Animals in Roman Italy: integrating the zooarchaeological and textual evidence* (JRA Suppl. 54) (Portsmouth, RI 2004).
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Museion* 6.2 (2006), 137–61.
- M. MacKinnon, 'Sick as a dog: zooarchaeological evidence for pet dog health and welfare in the Roman world', *World Archaeology* 42.2 (2010a), 290–309.
- M. MacKinnon, 'Cattle "breed" variation and improvement in Roman Italy: connecting the zooarchaeological and ancient textual evidence', *World Archaeology* 42 (2010b), 55–73.
- A.G. McDowell, *Village Life in Ancient Egypt. Laundry Lists and Love Songs* (Oxford 1999).
- J. Mokhtarian, *Elements of Talmudic Culture in Sasanian Persia* (Berkeley forthcoming).
- L.A. Moritz, *Grain-Mills and Flour in Classical Antiquity* (Oxford 1958).
- E. Naville, *The Temple of Deir El Bahari* (3 vols) (Chicago 1923).
- T.P. O'Connor, 'Working at relationships: another look at animal domestication', *Antiquity* 71 (1997), 149–56.
- M.A. Powell, 'Ukubi to Mother . . . the situation is desperate', *Zeitschrift für Assyriologie* 68 (1978), 229–30.
- L. Rawlings, 'A dog called *Hubris*', in S. Lambert (ed.), *Sociable Man: essays on ancient Greek social behaviour in honour of Nick Fisher* (Swansea 2011), 145–59.
- A. Sami, *Persepolis (Takht-i Jamshid)* (Shiraz 1970).
- H.H. Scullard, *The Elephant in the Greek and Roman World* (Ithaca 1974).
- D. Serjeantson, *Birds* (Cambridge 2009).
- J.-A. Shelton, 'Dancing and dying: the display of elephants in ancient Roman arenas', in M. Joyal and R.B. Egan (eds), *Daimonopylai: essays in classics and the classical tradition presented to Edmund G. Berry* (Winnipeg 2004), 363–82.
- J.M.C. Toynbee, 'Graeco-Roman neckwear for animals', *Latomus* 35 (1976), 269–75.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- J. Vorys Canby, 'Falconry (hawking) in Hittite lands', *Journal of Near Eastern Studies* 61.3 (2002), 161–201.
- M. Weeden, 'State correspondence in the Hittite world', in K. Radner (ed.), *State Correspondence in the Ancient World. From New Kingdom Egypt to the Roman Empire* (Oxford 2014), 32–63.
- N. Wyatt, *Religious Texts from Ugarit* (London 1998).

5

PETS

According to some modern historians, the pet animal is a product of modernity, and the pet relationship one which appeared in the nineteenth century as a response to urbanism and the growing importance of the private sphere in society (Fudge 2008: 13–23). The sources collected in this section, however, demonstrate that pet relationships, in the sense that we understand them, can be found in the literary and archaeological records of Egyptian, Greek and Roman society (apart from one profound difference, the inclusion of humans in the category of ‘pet’ – see further below nos. 11 and 12, and HUMAN no. 12). It is no coincidence that the evidence presented in this chapter comes from Egypt and classical cultures: to some extent this is a bias of the sources, but it also reveals the early growth of the concept of the ‘pet’. In ancient Mesopotamian texts it is difficult to find the concept of a ‘pet’ at all, whereas the relationship of the ninth-century hermit with his cat (below no. 7) is one which we easily recognise. Indeed, Bradley (1998) argues that the growth of pet relationships at Rome from the second century BCE was a response to exactly the same factors of urbanisation and growth of wealth and conspicuous consumption.

A pet can broadly be defined as an animal with which a human develops an individual bond: the animal is named, is kept as a companion, and is never eaten. There has been considerable debate among ancient historians as to whether pet relationships in antiquity were genuinely similar to modern conceptions of the pet as ‘member of the family’, and Gilhus argues that in the ancient world we should use the term ‘personal animals’ rather than pets, to reflect the sometimes functional nature of the relationships (2006: 28–31). The evidence suggests, however, that this concern is misplaced: the Roman author Arrian’s hunting hound Hormê, for instance, was a working dog rather than a lapdog, but Arrian’s moving tribute to her (below no. 3) demonstrates a clear personal bond beyond her practical role. Other pet relationships were certainly less personal and more about the establishment of status, especially among rulers, but this is hardly unique to antiquity: aspects of conspicuous consumption in pet ownership are equally common today. Roman society in particular shows strong evidence of aristocratic display with the keeping of exotic animals and elaborate burials for pets (see HORSE no. 17), but we can compare the same motivations with, for instance, Karl Lagerfeld’s pampered cat Choupette (see Veevers 1985 on the element of status inherent in petkeeping). Contradictions in the treatment of different species have also been noted for antiquity – dogs could be feral scavengers as well as household pets, and hares both pets and food – but this too is still common: in modern Moscow

dogs are kept as pets while packs of feral strays roam the city, and in the UK rabbits are still both kept as pets and eaten. It seems that in many ways scholarly anxieties about the true quality of pet relationships in the ancient world may be speaking as much to modern concerns as ancient.

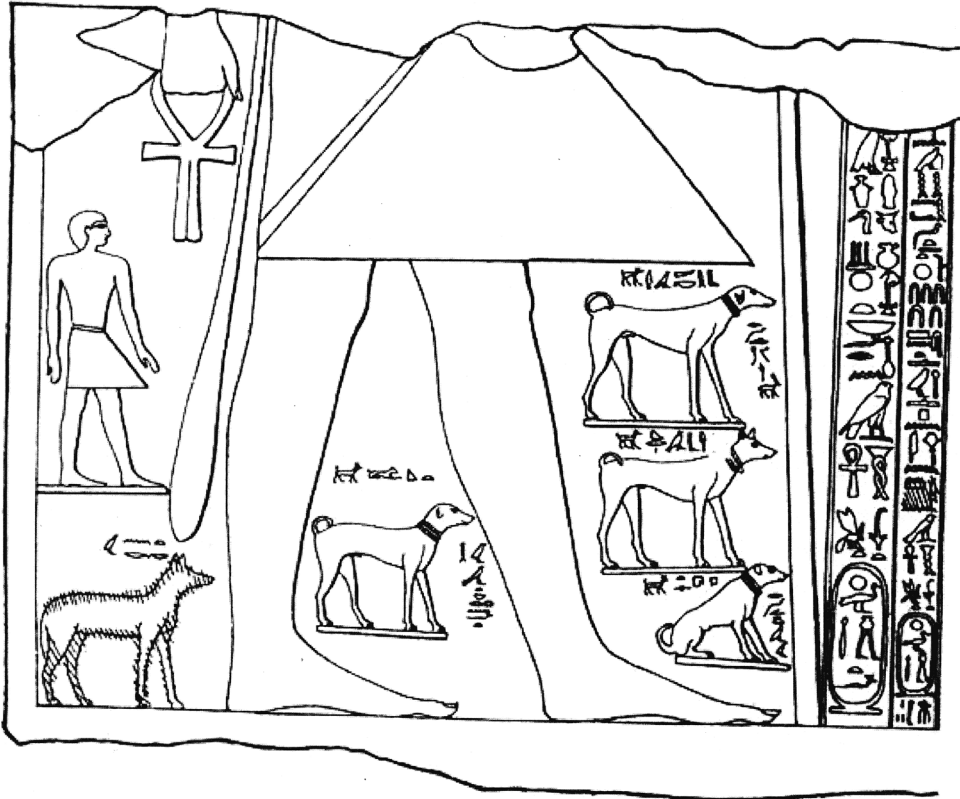
Recent developments in cultural and biological theory have widened the frame of reference in our own thinking about animals, with the adoption of the terms ‘companion species’ and ‘companion animals’ to refer to the wide range of animals with which humans live. The notion of ‘companion species’ is used in a more comprehensive sense to analyse what Haraway refers to as ‘co-constitutive human relationships with other [creatures]’ (2003: 21). Humans, she argues, are always ‘entangled’ with the animals they encountered, and animals such as sheep and goats, for instance, can therefore be considered as ‘companion species’ for ancient civilisations in which the herding of flocks of goats and sheep was crucial for human livelihood. Donkeys, likewise, worked side-by-side with humans, and ancient accounts stress the relationship of interdependence which developed between the two species (see *DONKEY* no. 8). We should therefore be alive to the idea that human–animal bonds of affection and interdependence redefine the boundaries of what it means to be a ‘pet’ and that the working domesticated animals of antiquity have the potential to be understood in this light too.

The pet relationships documented here and in other chapters thus cover a wide range, from lapdogs and aquarium fish to farm animals as playmates for children, and from dangerous animals kept as status objects to working animals such as hounds and horses. The evidence shows that pets were not solely the preserve of the rich: the upper classes tend to predominate in our sources, but the balcony aviary of the apartment-dweller in Pompeii (below no. 20) testifies to a desire for pets which reached beyond the elite. The treatment of pets in antiquity also runs a gamut, from the close care for dogs evident in the archaeological record (MacKinnon and Belanger 2006) to the casual cruelty of extracting teeth of big cats and monkeys, but it is important to put this in context; the societies of the ancient world were violent, hierarchical and slave-owning, and treatment which we would consider unacceptably cruel was the norm for people and animals alike (and indeed the advancement of modern society has hardly put an end to cruelty towards animals).

DOGS

1. Royal hounds

*Fragmentary painted limestone stele from the funerary shrine of
Imyotef II Wahankh at Thebes, XI Dynasty, c. 2108–2059 BCE*



COMMENT: Pharaoh Imyotef II Wahankh was clearly a dog-lover. His funerary shrine at el Tarif in western Thebes was augmented by a finely worked stele representing him (although only his legs survive) in the company of five of his dogs. All have their names recorded in hieroglyphic inscriptions: Abaqer (an Old Berber word for ‘hound’, the equivalent of the Egyptian *tjesm*), Pehtes (‘Blackie’), Tegra (‘Kettle’), Tekenru (?) and, between her master’s legs, in the most exalted position, Behkai (‘Gazelle’). Around eighty Egyptian dog names are known, many referring to their colour – ‘Goldie’, ‘Ebony’ – or their character – ‘Brave One’, ‘Lively One’, ‘The Tail as of a Lion’, ‘Reliable One’, ‘North Wind’, ‘Antelope’. Pet dogs often had foreign (mainly Berber and Nubian) names (Durr 1996).

Imyotef II’s dogs were also honoured with a group statue which no longer survives, and they were buried in wooden coffins alongside their royal master. One Old Kingdom tomb inscription (possibly V Dynasty) mentions a royal guard dog which after death was embalmed and buried with the pharaoh (Reisner 1936):

The dog (*tjesm*) which was the guard of His Majesty: Abuwtiyuw ('Pointy-Ears') is his name. His Majesty ordered that he be buried (ceremonially), that he be given a coffin from the royal treasury, fine linen in great quantity, (and) incense. His Majesty (also) gave perfumed ointment, and (ordered) that a tomb be built for him by the gangs of masons. His Majesty did this for him in order that he (the dog) might be honoured (before the great god, Anubis).

Like Abuwtiyuw, the hounds Abaqer, Pehtes, Tegra, Tekenru and Behkai were all *tjesm* (see DOG no. 1) and were valued, therefore, for their hunting skills. Only two of Imyotef's dogs have the characteristic pointed, upright ears, however: the other three *tjesm* have had their ears clipped (Brewer, Clark and Phillips 2001: 34), but their short curly tails remain a hallmark of the breed.

Affection for pet dogs is not hard to find in Egyptian and Near Eastern sources. As a series of Sumerian proverbs (Alster 1997 (1): 136–7) state:

The dog knows the man who loves him;
when the dog acts as judge,
its tails [is] the commissioner. . .

A dog treated with kindness
becomes a pet dog.

The modern saying of '(not) biting the hand that feeds you' had an ancient Egyptian equivalent. Amenemope asks in his Instructions rhetorically: 'Concerning the ration: the dog of its master, does it bark at him who has given it?' Pet dogs could also be trained (Sumerian proverb 2.69; Alster 1997 (1): 67):

A licking dog waiting
For instructions:
'Where [is it]?
You, bring it back! Stand!'

2. Patrikê, a Roman toy dog

Carmina Epigraphica Latina no. 1176

Drenched with tears, I carried you to the grave, beloved little dog,
As I carried you in happier times for fifteen years past.
No longer, Patrikê, will you give me a thousand kisses
Nor will you sleep happily upon my neck.
Grieving, I have laid you in the marble tomb you deserve,
And I have joined our spirits in eternal repose.
Alas, what a pet I have lost, so human in your clever ways!
Sweet Patrikê, you used to sit at table with me
And beg prettily for titbits on my knee;
You knew how to lick the cup with your eager tongue
Which my hands often held out to you,
And when I came home tired you would greet me
With joyfully wagging tail,
And show as though speaking all your affection for me.

COMMENT: This inscription, found at Salernum near Pompeii, is a funerary epigram for a pet dog called Patrikê, a Greek name perhaps best translated as ‘Lady’. Any pet owner will recognise her master’s praise for her responsiveness to his mood, her playfulness and her charming ways of communicating, and will sympathise with his grief at losing her. The description suggests that Patrikê was a small dog, perhaps a terrier type or a fluffy Maltese; such dogs are very frequently shown in art and literature as cute and engaging pets for adults and children alike (Calder 2011: 83–4; Busuttill 1969). Epitaphs for animals are surprisingly common in the Hellenistic and Roman world (see also no. 22 below, DOLPHIN no. 4), and dogs are the animal most frequently commemorated, giving us many examples of dogs’ names, such as Margarita (Pearl), Myia (Fly), Parthenope, Akris (Cricket) and Kalathine (Tiny), and of the quality of relationship with dogs which owners valued (Bodson 2000; Toynbee 2013: 109–22). It would be easy to dismiss the literary epitaphs as simply poetic exercises, but a significant number of dog epitaphs are in fact inscriptions that were actually engraved on funerary monuments; obviously there is an element of conspicuous display in being able to commission an expensive memorial to a pet, but the expressions of grief and commemoration of the dog’s virtues are not merely conventional: lapdogs are praised for their affection, good behaviour and playfulness, and even a watchdog was memorialised as a ‘vigilant vehicle-keeper’ (CIL IX.5785).

3. Hormê, a Roman hunting dog

Arrian Cynegetica (On Hunting) 5.1–6

[Arrian has just commented that grey eyes need not be an indication of a poor-quality hound.] I myself reared a bitch with perfectly grey eyes, and she was swift, hardworking, spirited and surefooted, so much so that on one occasion she coursed four hares in a single day. In other ways she is the gentlest of dogs (she was still with me when I was writing this book), and extremely affectionate; I have never had a dog which was so eager to be with me and my friend and hunting-companion Megillus. Since she retired from hunting she is always with one or other of us; if I am at home, she spends her day with me, and accompanies me if I go out; when I go to the gymnasium she follows with me and sits beside me while I exercise; she goes before me on the way back home again, often looking around to check in case I have turned off the road, and when she sees me she smiles to herself and goes on ahead again. If I have to go out on some public business, she stays with my friend and behaves in exactly the same way with him. If either of us is ill, she will not leave our side, and when she sees us after even a short absence, she jumps up gently as if in welcome and barks to show her happiness, such is her affection. She sits beside one of us at dinner, and touches him now with one paw and now with another, to remind him that she should receive her share of the meal. She has a very wide repertoire of sounds, more than any other dog I have known, and communicates her desires with different barks and yelps. Because she was disciplined with a whip while still a puppy, to the present day if one of us even mentions a whip, she approaches the person who has said it, cowers down and begs him, kisses him with her mouth and jumps up to embrace his neck, and will not get down until his anger is assuaged and he relents. I think it only appropriate to record my dog’s name so that it survives for posterity, stating that Xenophon the Athenian owned a dog called Hormê (Dash), who was very swift and very intelligent and altogether blessed by the gods.

COMMENT: Arrian (more formally L. Flavius Arrianus Xenophon, explaining his reference to himself above) wrote a supplement to his namesake Xenophon's *On Hunting* (see HARE no. 4), offering advice on the care and training of hounds and the most effective methods of hunting. He interrupts his discussion of the confirmation and appearance of hounds to offer a tribute to his favourite bitch which is revealing in his description of both her behaviour and his own. Grey-eyed Hormê was a hunting-hound, but she was evidently not considered solely as a working dog: when no longer fit for hunting she became a pet dog, and Arrian clearly valued her affection and responsiveness as much as her physical abilities. Several other examples exist of Roman hounds which became family pets: the British Museum, for instance, preserves the tombstone of a white Gallic hound, Margarita (Pearl), who began life as a hunting dog in the northern forests, but ended as a cherished pet who slept on her owners' couch (CIL VI.29896.2).

The movement from working dog to pet should perhaps not seem so unexpected in an ancient context. Arrian, like all of his class, had a household full of slaves, and abundant human labour to tend to his hounds. In ch. 9 he recommends that the hounds should not sleep together, to prevent the spread of skin diseases; instead they should sleep beside slave keepers who could also monitor the dogs' health and offer them companionship. Even hunting dogs were thus habituated to close human contact, and it may in fact be the case that, though no slave testimony has come down to us, the relationships between dogs and the slaves who tended them were the deepest and most meaningful of all (Lewis forthcoming).

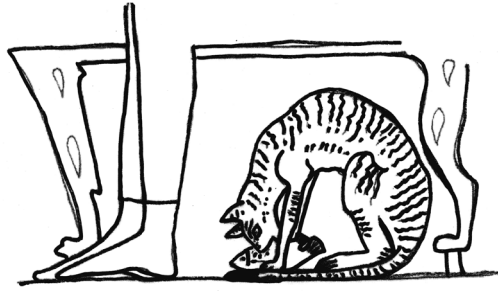
CATS

4. Pet cats in Egypt

a) Tomb of Merymery, Saqqara, XVIII Dynasty



b) Tomb of Nakht, Thebes, XVIII Dynasty



COMMENT: The earliest known depiction of a domestic cat is found in the Middle Kingdom tomb of Bakheth III at Beni Hasan (Malek 1997: 40). In the New Kingdom, from the reign of Tuthmosis III, domestic cats are represented frequently in elite tomb art (although never in royal tombs), suggesting that they had been fully integrated into the Egyptian home. Theban tomb paintings tend to show cats occupying two distinct spheres: underneath a chair within the home or in the open air accompanying the family in fishing and fowling scenes (see below).

When shown beneath a chair, the cat is always depicted under that used by the lady of the house (and in many cases a monkey is shown under the husband's chair: Malek 1997: 59); Lady Meryptah's pet cat above elegantly lifts a paw and behaves as gracefully as her mistress. Women seem to have been the primary cat-owners in Egypt, possibly because of the animal's connection with the goddesses Bastet and Mut, and it is feasible that the cat had erotic or sexual significance for the Egyptians (Houlihan 1996: 83). The cat is always displayed with humorous and affectionate touches: in the tomb of Anen, for instance, a cat embraces a goose while a green monkey jumps over them both (Houlihan 2001: fig. 16), while the tomb of Penbuy and Kasa features a cat hissing and spitting at a goose. Eating is frequently shown: the tomb of Nakht (b, above) depicts a tabby cat eagerly eating a fish underneath the chair of Nakht's wife, Lady Tawi. It is a realistic rendering of a long-bodied cat with an impressively long ringed tail.

5. Ta-miwt: a pet cat fit for a prince

Sarcophagus of Prince Thutmose, XVIII Dynasty from Memphis (Cairo, Egyptian Museum)



COMMENT: While pet cats are never represented in royal tombs, we know that pharaohs, queens, princes and princesses enjoyed their feline companions as much as the Egyptian nobility did. The first known pet cat name, Nedjem, dates to the reign of Thutmose III and we know that Amenhotep I's cat was called Buhaki. Prince Thutmose, son of Amenhotep III and an elder brother of Akhenaten, had a cat named Ta-miwt. When she died the prince had her interred in a fine sarcophagus with a picture of his beloved pet carved on its exterior. She is represented seated before an offering table while the text associates the dead pet with the god Osiris; a formula describes her as 'Osiris, the Lady Cat' (Janssen and Janssen 1989: 17). She is shown in Osirid *shabti*-form at the far right of the sarcophagus scene. Interestingly, we do not know of many cats' names since most were called simply (at least in the inscriptions) by the onomatopoeic '*miw*' ('meow'). Apart from dogs (see above), pets in Egypt were rarely given names.

6. A pet cat trained to hunt?

*Fragment of a polychrome tomb-painting from Thebes,
XVIII Dynasty (London, British Museum EA37977)*



COMMENT: One of the most beautiful hunting scenes to have survived from ancient Egypt was acquired by the British Museum in the 1820s, and although its provenance is not known the fragment (alongside nine others) is believed to be from the tomb of Nebamun (TT 181) at el-Khokha, Thebes, and can perhaps be dated to the reign of Thutmose IV. The tomb owner, depicted on a larger scale than his companions, stands in a papyrus skiff holding a throw stick in one hand and clutching three (decoy?) ducks in the other. His richly dressed, elegant wife stands behind him and their daughter squats between her father's legs.

The family's pet cat is tentatively balanced upon two papyrus stalks which bend beneath its weight. It has captured birds in its front and hind paws, and with its teeth grabs a duck by its wing. The presence of the cat – and the carnage it is creating, with birds flapping about and butterflies flitting past – adds energy and excitement to the scene. It is hard to know if cats were really employed to flush out fowl and other game, let alone retrieve prey, since this seems to contradict

a cat's natural behaviour (Malek 1997: 66). It is more probable that the presence of the cat in this tomb scene helped assure their owners that their beloved pets would be with them in the afterlife.

7. A hermit's beloved pet cat

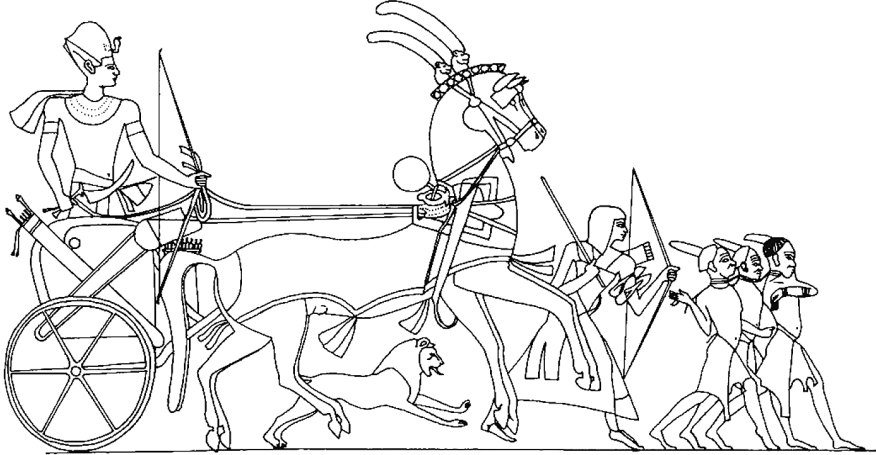
Ioannes Diaconus, Life of Saint Gregory the Great I.60

There was a hermit, a man of great virtue who owned nothing in the whole world apart from a she-cat, which he loved exceedingly, and cherished as his bosom companion. This man prayed to God to reveal to him what reward and status he could expect in Heaven, since he had for the love of God despised all earthly goods and possessed no riches. One night as he slept it was revealed to him in a dream that he would have a place prepared for him in heaven alongside Pope Gregory. At this the hermit was most upset that he was going to receive the same reward as one who had amassed such earthly riches, when he himself had voluntarily lived a life of poverty. In the course of his discontent, as he continually compared Gregory's wealth with his own poverty, he had another dream in which he heard God say to him, 'It is not riches themselves, which make a man wealthy, but the desire for riches; why therefore do you presume to compare your poverty with Pope Gregory's wealth, since you prove every day that you love your cat more than anything else, stroking her every day, and Gregory, in contrast, felt no affection for his great wealth, but rather despised it and gave it away to those around him with an open hand?' The hermit, struck by these words, gave thanks to God, and instead of thinking it a disgrace to be placed beside Gregory, began to pray diligently that he would be found worthy to take his place alongside him.

COMMENT: This story of the hermit and his cat was written after the classical period, in the ninth century CE, and it is not until the very end of classical antiquity that we begin to find strong evidence for cats being kept primarily for companionship rather than as useful pest controllers. All earlier classical sources present the cat as hunter, dwelling on both its effectiveness in catching mice, and the problems it could cause by killing other domestic birds, whether farmyard or pets: in the *Greek Anthology*, for instance, we find two epigrams on a pet partridge which has been killed by a cat, with threats for revenge against the hunter (VII.205, 206), and the Aesopic fable tradition includes many tales of cats which seek to deceive and catch both mice and domestic fowl (Engels 1999: 60–4). As we have seen, in South Italian and Etruscan vase-painting people often interact with cats in a more playful way (CAT no. 5), but there are no clear-cut pets: Plutarch, writing in the first century CE, includes cats in a list of potential pet animals (*Mor.* 482c), but the passage is a tendentious one in which he observes disapprovingly that men will make pets of undesirable wild animals while rejecting their own kin. In contrast to the many epitaphs for horses, dogs and even birds from Roman times, we find none for cats (Bodson 2000). It is possible to trace a growth in affection for the cat in the wider empire: the first (and only) named cat of classical antiquity appears on a late second- or early third-century mosaic at Volubilis, depicting the cat Vincentius who hunts a mouse called Luxurius (Donalson 1999: fig. 12). Cats also became more frequent in Gallo-Roman sculpture of the second and third centuries CE (though Johns 2003 takes issue with some of the identifications), and personal names such as Felicla and Cattus, derived from *felis* or *cattus*, became more common in the later empire (Engels 1999: 103–5). Only in the early medieval period, however, do we find sources speaking of individuals stroking cats and treating them as permanent companions, and in most cases the stories relate to monks or nuns, for whose solitary and contemplative life the cat made an ideal partner.

8. Pharaoh's pet lion

*Line drawing taken from the Great Temple at Abu Simbel,
XIX Dynasty (after Janssen and Janssen 1989: 19)*



COMMENT: At his great mortuary temple at Abu Simbel in Nubia, the pharaoh Ramses II depicted himself as a victorious conqueror of the Kushites returning home to Egypt in triumph. He is accompanied by a tame lion, depicted running alongside the king's chariot horses. It is possible that this is the same lion that Ramses took with him on campaign in Syria when he met the Hittites in battle at Kadesh; in one of the scenes at Luxor temple a tame lion is shown relaxing near the royal stables, a lion-handler with a raised stick nearby (Kitchen 1982: 55, fig. 18; the same animal is depicted at the Ramesseum: Desroches Noblecourt 2007: 72). Lions have always been regarded as not only the ideal hunting targets of kings but also as royal companions. Even the I Dynasty tombs at Abydos reveal that monarchs, such as King Aha, were buried with lions and their cubs. Lions can be tamed as pets and a Middle Kingdom story tells of a magician who charmed a lion into following him around on a leash, while a popular New Kingdom saying stated that, 'The savage lion abandons its wrath and comes to resemble the timid donkey' (Janssen and Janssen 1989: 19).

9. Roman emperors' pet lions

Historia Augusta Elagabalus 21.1, 25.1

Among his pets [the emperor Elagabalus] had lions and leopards which had been deprived of teeth and claws [*exarmati*] and tamed by trainers; these he would suddenly order to lie down on the couches during the dessert and after-dinner drinking, to inspire an amusing terror among the diners, who were unaware that the animals were incapable of harm. . . . When his friends were drunk he would often shut them up in a bedroom, and during the night would suddenly put into their room his lions and leopards and bears which had been made harmless, so that when they woke at first light, or, worse, during the night, they would find themselves in a room with lions, bears and leopards; several of them died of fright.

Dio 79.7.2–3

After this, Caracalla went out by a certain door, and his pet lion, which was called Akinake [Scimitar], and which he would feed from his table and allow to sleep on his bed, seized hold of him as he was leaving and tore his clothes; but Caracalla paid no attention to this portent. For he had many other lions as pets and always kept some of them around him, but this particular lion he would often be seen stroking in public.

COMMENT: The practice of taming lions was an old one, and at Rome there is a lot of evidence for trained lions which performed in the theatre: both Seneca and Statius refer to tame lions that could be handled by their keepers or allowed to play with prey animals, and Martial was clearly very impressed by the lions which allowed hares to play around them without attacking them, writing no fewer than seven epigrams on the theme (Sen. *Ep.* 85.41; *De Ira* 31.6; Stat. 2.5; Mart. *Ep.* 1.6, 14, 22, 48, 51, 60, 104). All of these writers lived in the first century CE, and it seems that even in the early empire it was not economic to import a lion and kill it on its first appearance, so instead they were turned into individual performers, some taking on a series of opponents, human and animal, and some performing demonstrations of their docility. The emperors, however, enjoyed the presence of tamed lions in their household as the ultimate royal pet. There are enough stories of supposedly tame lions which turned on their trainers or others (Mart. *Sp.* 10; *Ep.* 2.75) to indicate that an adult lion is far too dangerous to keep at close quarters; an often-repeated Greek simile was the lion-cub raised as a pet which reverts to ferocity (Aesch. *Ag.* 717–36; Ar. *Frogs* 1431–2). Here the term *exarmati* used of Elagabalus' pets suggests that training alone was not sufficient, and that (in a process distressing to imagine) the animals had had claws and teeth removed. Even this, however, would not render a fully grown lion harmless, and Elagabalus' unsuspecting friends were right to be terrified.

PRIMATES

10. Monkeying about

*Painted ostrakon; Ramesside Period from the Ramesseum, Thebes
(London, Petrie Museum 15946; after Houlihan 2001: fig. 101)*

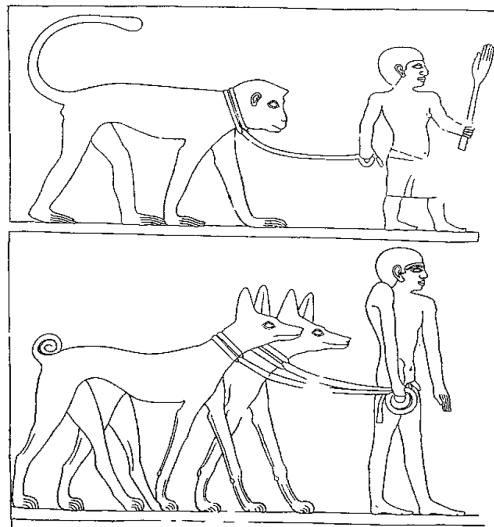


COMMENT: This is a charming scene made more amusing when one realises how it was crafted. The original ostrakon simply showed the elegant profile of a Ramesside nobleman, his wig garlanded with lotus flowers for a party, with a cone of perfumed wax set on top of the tresses. Another hand, perhaps at a later date, added the monkey reaching up to scratch the haughty aquiline nose. It is a graffito on a graffito and is sublimely crafted as a miniature joke. Nobles frequently kept pet monkeys (Janssen and Janssen 1989: 20–4) and this visual jest plays on the intimacy that could develop between the pet and its owner.

Monkeys can be difficult to keep as pets and frequently become aggressive, and the Egyptians therefore had a preference for female pet baboons, which were easier to domesticate than males, being of a much gentler nature (see *WORKING ANIMALS* no. 5). The pharaoh Thutmose III had his favourite baboon buried with him in his tomb in the Valley of the Kings (Goudsmit and Brandon-Jones 2000: 112) and the office of ‘Keeper of Monkeys’ existed at the New Kingdom royal court (Janssen and Janssen 1989: 25). Another young pet baboon, now in Cairo (CG 29837) was buried next to a hunting hound – the prized pets of a pharaoh, perhaps Amenhotep II or Horemheb (Ikram 2005b: 213; Ikram 2006: 20–3). Mummified remains of pet baboons found in other royal tombs indicate that during life they were well looked after and healthy, although their canine teeth had been extracted to avoid the risk of them seriously biting anyone (Ikram 2005a: 4). Very few names of pet baboons survive, but those that are known include ‘His Father Awaits Him’, ‘When the Foreign Country is Pacified the Land is Happy’ and ‘Thoth has Come’.

11. Human pets in Egypt?

a) Line-drawing of a painted relief from the tomb-chapel of Ti (D 22) at Saqqara, V Dynasty (after Houlihan 2001: fig. 4)



b) Autobiography of Harkhuf from his tomb at Qubbet el-Hawa, VI Dynasty (after Lichtheim 1977: 24)

You have said in your letter that you have come down in safety from Yam with the army and brought many beautiful gifts which Hathor, Lady of Yamu, has given to the King of Upper and Lower Egypt.

You also say in this letter that you have brought a dwarf of divine dances from the land of the horizon-dwellers. Like the dwarf whom the Treasurer of the God, Baurded, brought from Punt in the time of King Isej.

You say to my Majesty, Never before has one like him been brought by any other who has visited Yam.

Each year you do what your lord desires – spending day and night with the caravan. Now come northward at once to the Court. You must bring the dwarf, alive, sound and well to rejoice and gladden the heart of the King of Upper and Lower Egypt.

When he comes down with you into the ship, appoint reliable people who shall be beside him on each side of the vessel and take care lest he should fall into the water.

When he sleeps at night, appoint trustworthy people who shall sleep beside him. Inspect him ten times a night because my Majesty desires to see this dwarf more than the all products of Sinai and Punt.

If you arrive at the Court and the dwarf is with you, alive, and well, my Majesty will make you many excellent honours to be an ornament for the son of your son for ever. All the people will say when they hear what my Majesty does for you: 'Is there anything like this which was done for the privy counsellor Harkhuf, when he came down from Yam?'

COMMENT: It is clear that the Egyptians were great pet-fanciers and many elite men and women kept domesticated animals which were frequently depicted on tomb walls. Very often the animals are shown walking close to, or sitting by, their owners, although some scenes, such as this one from the tomb of Ti, show pets in the company of other humans – in this instance a dwarf and a hunchback. The physical imperfections of the two humans contrast with the elegance of the animals they are charged with maintaining; the dwarf's stature is directly played off against the size of the monkey which is depicted larger than the human. A VI Dynasty scene from the tomb of Nefer at Giza depicts a dwarf named Mereri standing beneath a chair and holding a monkey, represented on the same scale, on a leash as it climbs on to Mereri's head (Janssen and Janssen 1989: 23, fig. 15). Royal and elite households frequently kept such remarkable humans as servants and entertainers and although dwarfs could rise to positions of trust and respect within Old Kingdom society, we should not forget that, like pet animals, these diminutive human beings were primarily kept to delight and amuse. The young pharaoh Pepy II's enthusiastic instructions to his minister Harkhuf to carefully bring a foreign dwarf or pygmy back to Egypt has all the resonance of a child eagerly awaiting the arrival of a new puppy.

12. Human pets in Rome

Martial Epigrams VII.87

If my friend Flaccus delights in a long-eared fox,
If Canius loves his gloomy Ethiopian,
If Publius burns with love for his tiny puppy
And Cronius adores the monkey which resembles him;
If Marius is fond of a destructive mongoose,
And you, Lausus, love your talking magpie;
If Gadilla drapes a clammy snake around her neck,
And Telesina builds a tomb for her nightingale;
Why then should one not love Labyrtus' charming Cupid-like face,
When one sees these strange creatures delight their owners?

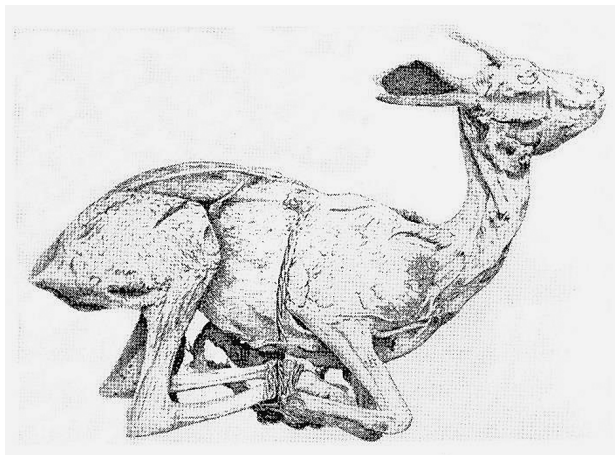
COMMENT: Martial's epigram is difficult to interpret on several counts: on the face of it, it reads as a register of Roman pet animals, many of which can be paralleled elsewhere: Publius' puppy, for instance, is the lapdog Issa celebrated in another of Martial's verses (I.109). Yet the purpose of the poem is satirical: if all my friends can love these *monstra* (strange creatures), why shouldn't I love Labyrtus? Animals like foxes, snakes and mongooses might perhaps be considered freakish, but nightingales, magpies and dogs were hardly odd, and thus Martial seems to be satirising not the pets themselves, but the owners' excessive affection for them: building a tomb for a pet bird, or wearing a snake.

It is also hard to see in the last two lines why the poet should seek to justify his affection for a handsome slave, which would be unremarkable, by comparison to over-enthusiastic pet-owners, and Watson and Watson have suggested that the emphasis on Labyrtus' 'cupid-like' features indicates that he may have been a *morio*, a mentally deficient slave kept as a fool (2003: 263–4; see Garland 2010). This is of course the most uncomfortable aspect of the poem for the modern reader: the appearance of humans, Canius' black African slave and the poet's own Labyrtus with his child-like face, among the animal pets. The easy paralleling of humans and animals as pets was the product of a slave society in which people could be bought and sold, and in which the status of the slave was similar to that of a domestic animal, particularly in the case of children and the mentally impaired (see further HUMAN no. 12 and Bradley 2000).

OTHER MAMMALS

13. Lady Ankhshepenwepet's pet gazelle

Dried gazelle skin and bone; Late Period, XXIII Dynasty, from Deir el-Bahri (TT 56) (New York, Metropolitan Museum of Art 25.3.203)



COMMENT: The gazelle seems to have been an exclusive pet amongst elite women of ancient Egypt, and several gazelle mummies (or dried carcasses, as seen here) have been found in women's tombs (Ikram 2000 and 2006: 15–18). This particular dorcas gazelle was owned by Ankhshepenwepet, a singer of Amun of the XXIII Dynasty. The dried body of the gazelle was recovered from her Deir el-Bahari tomb where it had been buried at the foot of her coffin, alongside canopic jars and boxes of ushabtis. It was so well preserved that it seemed to be sleeping alongside its mistress. Examples of gazelle mummies buried alongside their female owners

suggests a special status for the individual gazelles because the examples of gazelle pets are few but distinctive. During the New Kingdom an iconographic association between gazelles and women of courtly rank is certainly in evidence: miniature golden gazelle-heads decorate the crowns and diadems of court ladies and concubines (Troy 1986: 129; Strandberg 2009: 137–40), and the few occurrences of gazelles kept (and buried) as pets may be living examples of this association.

There is a depiction of (possibly) two pet gazelles on a wall in the tomb of the nobleman Meryre II at Amarna where six royal princesses stand alongside the seated pharaoh Akhenaten, who receives tribute. According to Davies, two of the princesses are portrayed carrying a small horned animal: 'Neferneferuaten seems to be holding up a tiny gazelle, and her sister behind has a similar pet on her right arm' (Davies 1905: 39).

Infant gazelles can easily be captured, because their mothers are timid and will abandon their young if they sense danger is near; the young can then simply be picked up and carried off. A scene from the V Dynasty tomb of Niankhkhnum and Khnumhotep at Saqqara shows a donkey carrying a basket-full of gazelle fawns, possibly collected after being abandoned by their mothers in this way (Osborn and Osbornova 1998: 176, fig. 13).

A wall-painting from the tomb of Khnumhotep II at Beni Hasan shows Asiatics leading (what appear to be) a Nubian ibex and a dorcas gazelle to the tomb-owner (see *DONKEY* no. 7); the gazelle is held on a short leash and is grasped by its horn by a handler.

14. The Emperor Valerian's bears

Ammianus Marcellinus 29.3.9

My mind recoils from recounting all his misdeeds, and at the same time I fear that I may seem intentionally to seek out the faults of a ruler who was in other ways perfectly good. Yet it is not right to omit or pass over in silence the fact that he kept two ferocious man-eating bears named Mica Aurea and Innocentia, and took great pains over their care, keeping their cages next to his own bedroom and stationing trusty guards to ensure that no chance action might destroy their eagerness for slaughter. Finally he allowed Innocentia, after he has seen the burial of many victims whom she had torn apart, to return unharmed to the forest, in return for such good service.

COMMENT: Mica Aurea and Innocentia are, because of this story, the most famous named bears in antiquity. They form part of a rich tradition of remarkable pets kept by Roman emperors, which included both the exotic (above no. 9) and the familiar treated in an extreme way (see *HORSE* no. 20). Unlike the bears of Elagabalus which were rendered harmless and kept only to frighten the emperor's guests, Innocentia and Mica Aurea were prized for their ferocity, although it is not clear from Ammianus' story whether their killings were carried out in the arena or privately. We do, however, have plenty of evidence for bears used to perform executions – Martial *Spect.* 7 and 21 describe criminals killed by bears (in 7, a Caledonian bear), and bears were a particular fear of the Christians who met their end in the arena, given their natural ferocity (*The Martyrdom of Saints Perpetua and Felicitas* 19). In this context, the bears' names are ironic: 'Innocentia' means 'harmless', and there is an obvious play on words as she is released in return for good services, while 'Mica Aurea' translates as 'Grain of Gold', a pretty diminutive perhaps referring to the colour of her fur. Valerian's bears were untamed, but Seneca (*De Ira* 2.31.6) seems to claim that bears were kept as domestic pets; the ancients, however, realised the impracticality of this idea, and Ael. *NA* III.21 preserves a story of a bear-cub raised in the household which turned wild once grown.

15. Pet hares

a) *Attic red-figure kylix (interior), Paris Louvre G121, attr. Douris, c. 480 BCE (after Hoppin 1919 (I): p. 255)*



b) *Meleager, Greek Anthology VII.207*

A swift-footed, long-eared leveret, newly snatched from my mother's breast, fair-skinned Phanion cherished me in her bosom and fed me with spring flowers. I no longer pined for my mother, but grew fat from so many dainties and died from too much feasting. She buried me next to her bed so that even in her dreams she would always see my tomb close at hand.

COMMENT: Meleager's verse is one of a series of epitaphs for pets and other small creatures in the *Greek Anthology* (see ANT no.7). Interpretations of the poem have varied among scholars: Bodson (2000: 30–1) and Kitchell (2014: 85) see it as a genuine epitaph for a young woman's pet, Gutzwiller (2012: 98) as a humorous parody of an epitaph, and Thomas (1999: 57–63) as an erotic poem full of double meanings. But there is no reason to doubt that hares were kept as pets in classical and Hellenistic Greece, especially leverets orphaned during a hunt: the fifth-century Attic cup illustrated here depicts a man holding a pet hare on his knee, and others depict hares caged, leashed or wandering free in the house (Bouvier 2000: 107–8). Schnapp (1989) traces the ways in which hares are shown on Attic pottery, evolving from game brought home by the hunter to lovers' gifts to cherished pets. The context of the epitaph, then, is all too believable: a leveret found after its mother was killed, taken as a pet and inexpertly raised: as Calder (2011: 95) makes clear, there was little understanding of appropriate diet or care for wild animals, and the evidence of pottery shows hares kept in cramped cages or held by the ears in potentially damaging ways. That hares can be successfully tamed and make rewarding pets is demonstrated by the experience of the eighteenth-century poet William Cowper, who published an entertaining account of his three pet hares, Puss, Tiny and Bess, in *The Gentleman's Magazine* (1784).

BIRDS

16. Pigeon-fancying

Libanius Letters 1550 and 1553 W (excerpts)

1550 To Ambrosios

Not only have you sent me doves, but the very best of your father's flock. They are both beautiful and faithful, for if you let them fly free they do not desert, but all return easily and safely to their posts. . . . There is no need for you to send any others, for these ones have already bred. It is all the more rewarding not to bring them in from outside, but to breed many from few.

1553 To Andromachos

Friendship improves everything, and especially one's memory: for you, having once heard me praising doves from Egypt, guarded the statement in your mind, and, finding yourself in Egypt, have done me the favour of sending a veritable colony of doves. They are already very numerous, for they have bred, and I think that as time goes on I shall be able to send them to others in Ionia, as you have done for me. For they are much sought-after on account of their size and plumage.

COMMENT: Libanius, a fourth-century CE scholar in Antioch, refers to his interest in pigeons several times in his correspondence. Although he claims in his autobiography (I.82) that he gave up all frivolous pursuits, including the raising of pigeons, when he began to study rhetoric, his later letters show that this was not entirely true: his friends knew of his interest in pigeon-breeding, and sent him much-appreciated birds as presents. Both Pliny (*NH* X.110) and Varro (*Rust.* III.7.10) indicate that pigeon-fancying was already popular in late Republican and early imperial Rome, with high prices being paid for the best birds, and the third-century CE emperor Severus Alexander is said to have been so devoted to the pastime that he owned 20,000 doves (*SHA Sev. Al.* 41.7).

Doves were popular pets among all classes, not only specialist breeders: poets wrote in praise of pet doves (*Anacreontea* 15; *Mart. Ep.* I.7), and a famous image on a classical gravestone from Paros depicts a young girl with tame doves (Metropolitan Museum of Art, Fletcher Fund 27.45; Oakley 2003: fig. 11 and pp. 173–4, 180). The dove's homing instinct noted by Libanius made it practical to keep without caging – a line of Sophocles at *Plut Mor.* 959e refers to doves kept indoors, while Varro (*Rust.* III.7.7) depicts patrons in the Roman theatre letting doves fly from their laps, presumably expecting them to find their way home. 'Dove' was used as a term of affection, and Robert (1971: 90–1) notes Greek female names drawn from types of dove (*Peristera*, *Phattion*, *Peleas* and *Trygon*).

17. Pet ducks

*Attic grave stele, 350–300 BCE, Athens National Museum 895
(drawing by Tessa Rickards)*



Inscription: KALLISTION NIKOMACHES THUGATER (Kallistion, daughter of Nichomache)

COMMENT: On this grave monument the deceased, a young girl named Kallistion (meaning ‘most beautiful’), is shown with her maidservant and dog. Kallistion holds a duck in her left hand, touching its beak with her right hand in an affectionate gesture. Pet birds are the most common companions of children on classical Greek tombstones, together with dogs: both children and young men and women are shown with small songbirds, larger doves and partridges, and water birds, of which ducks are the most common type (Clairmont 1993 (VI)). The figures on the monuments usually hold the duck in their arm or on their lap, indicating a close bond between bird and owner. To a modern sensibility the idea of a pet duck or goose might seem odd, but Greek houses lacked the strict indoor/outdoor demarcation of modern urban life: houses faced inward around a central court, making it possible to keep even relatively large birds as household pets (see also CRANE/STORK no. 3). There has been some discussion among scholars as to whether the birds should be understood as depictions of real pets or have symbolic value (Oakley 2003: 180–1), but Attic pottery also depicts women and children with pet ducks (Hamilton 1992; Calder 2011: 91–2). The idea is also supported by the fact that while geese are also sometimes

shown as pets (and indeed the distinction between a duck and a goose is sometimes in the eye of the beholder), swans, despite their religious connotations, never appear in this context.

Ducks as pets at Rome are mentioned by Plautus (*Captivi* 1002–3), who terms them ‘rich children’s pets’, alongside jackdaws and quail, and are often shown in art: in Pompeii children or cupids with ducks are common in wall-paintings and as garden statues (Watson 2001: 364–5). In both Greek and Latin the diminutives of duck, *nettarion* and *anaticula*, were used as a term of affection in just the same way as in traditional English (Arist. *Wealth* 1011; Plautus *Asin.* 693).

18. A pet parrot

Statius Silvae 2.4

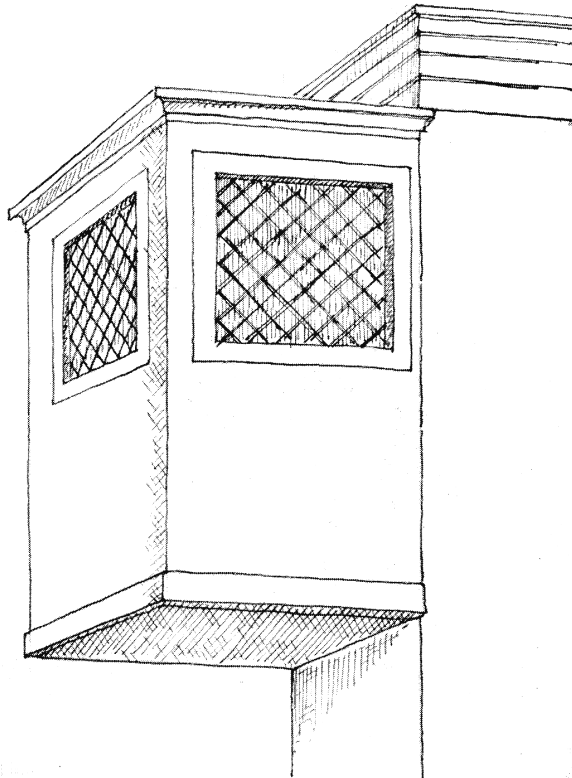
Parrot, king of birds, your master’s eloquent pet,
 Parrot, skilful mimic of human speech,
 What sudden fate cut off your chattering breath?
 Only yesterday, unfortunate bird, you shared your last meal
 With us, and we saw you picking titbits from the generous table
 And roaming over the couches until after midnight.
 Then you spoke, repeating practised phrases,
 But now, famous singer, you dwell in the unending silence of Lethe.
 Let the common tale of Phaethon give way:
 Not only swans shall sing your funeral dirge.
 But what a house was yours, gleaming with polished tortoiseshell,
 With a row of silver bars fitted with ivory
 And doors which squeaked and rattled under your beak –
 Now they creak a lament on their own. This beautiful cage
 Now lies empty, the grand palace no longer rings with your chatter.
 Let all the learned birds gather, those to whom Nature gave
 The skill of noble speech; let Phoebus’ raven mourn,
 And the starling, which remembers words it has heard spoken,
 The magpies, transformed in the Aonian contest,
 The echoing partridge, repeating words in sequence,
 And the sad nightingale who laments in her Thracian chamber.
 Mourn together, birds, and bring your kinsman’s body
 To the pyre, learning by heart this new lament:
 ‘He has perished, celebrated glory of our winged race,
 The parrot, emerald sovereign of the East,
 Whom neither Juno’s bird with her starry tail
 Nor the pheasant from chilly Phasis could outdo in looks,
 Nor the Numidian guinea-fowl hunted under the wet south wind;
 The parrot who greeted kings and spoke the name
 Of Caesar, at one time a friend and comfort,
 At another entertaining with words returned so skilfully;
 Whenever he was free from his cage, beloved Melior,
 You never felt alone. But he does not go to the shades
 Without glory: his body is burned with Assyrian cardomom
 And his delicate feathers exhale the scent of Arabian herbs
 And saffron from Sicily; unwearied by heavy old age
 He will ascend the scented pyre, a more fortunate phoenix.’

COMMENT: Statius' verse, from the end of the first century CE, stands in a tradition of poetic laments for pet birds: Catullus' lament for Lesbia's *passer* (SPARROW no. 4) and Ovid's for Corinna's parrot (*Amores* 2.6) are plainly in the poet's mind. The poem is mock-heroic and parodic, making the parrot 'king of the birds' in place of the eagle, yet still contains hints of the affection felt by Melior for his pet bird. We see it entertaining the guests at dinner, climbing from couch to couch (very characteristic of parrots, which will usually climb rather than fly) and nibbling from the dishes, and as well as its entertainment value in speaking, Statius refers to the companionship it offered to its owner. The lament of the other 'speaking' birds and elaborate funeral rite are comically overblown, but funerals for pets which had died are not unknown at Rome (see CROW/RAVEN no. 5).

Statius also provides much incidental information on the parrot as pet. Its Eastern exoticism is played up as a marker of its owner's status, and it has an expensive cage with silver bars – as *AP* IX.562 notes, parrot beaks can bite through flimsier materials – though it is not kept permanently confined. A fable of Aesop (244 Perry) similarly refers to a parrot flying free within the house. The poem unsurprisingly emphasises the parrot's skill in speaking, and ll.29–30 show that like many mimic birds it was taught to say 'Ave, Caesar'; parrots also learned to speak the Greek greeting 'Chaire' (Pers. *Prol.* 8).

19. An aviary for songbirds in Pompeii

Reconstruction drawing (after Spinazzola 1953: vol. 1, fig. 136)



COMMENT: Discussions of Roman aviaries invariably focus on Varro's lengthy description of the *ornithon* which he created at his villa in Casinum, a large and impressive structure with netted colonnades containing nightingales and blackbirds, set around a duckpond (*De re rust.* III.5.8–17; reconstruction drawing in Van Buren and Kennedy 1919). Aviaries on this scale allowed aristocrats to show off extensive collections of birds among fancy architecture. But one did not need to be rich to keep songbirds: one of the fascinating discoveries at Pompeii is the tiny aviary illustrated above, created by a town-dweller on the balcony of a second-floor apartment in the Via d'Abbondanza. The windows were covered by lattice, and nine intact feeding pans for birds were found on the balcony itself (Jashemski 1979: 108); plainly it was for keeping small songbirds such as nightingales and finches. As Jashemski comments, the creation of 'this tiny aviary, tucked into an upstairs apartment on a busy thoroughfare' shows the enthusiasm of Romans across all social classes for keeping songbirds. Pompeii also preserves the remains of a commercial aviary, built on a larger scale in the garden of the House of the Veteran Iulianus (VII.vii.16): a circular wall six metres across supported a netted superstructure large enough to supply pet birds to the town (Jashemski 1993: 188).

REPTILES AND INSECTS

20. A devoted pet snake

Aelian On the Nature of Animals VI.63

There was a young Arcadian boy who had a small snake as a pet. As the boy grew into a youth the snake also grew to be very large. The two were very fond of each other, but the boy's family became fearful of the snake's size – these snakes do gain a great size very quickly, and have a most fearsome appearance. So while the snake was sleeping with the boy on his bed, they picked up the bed and carried it as far away as possible; the boy then got up from the bed, and the snake was left behind. And the snake settled in the woods with the charms they offered and lived there happily feeding on food appropriate for its kind, preferring the wild places to the town where it had been closed up in a house.

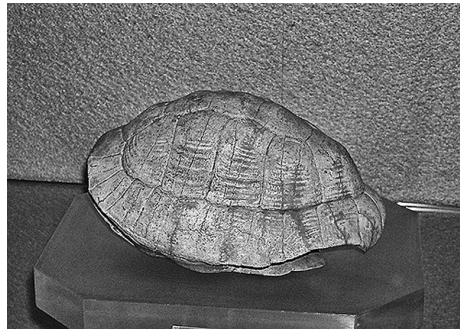
Time went by, and both boy and snake grew to adulthood. It happened that the Arcadian who had cherished the snake was travelling through the wilds when he was attacked by bandits; he was struck by a sword and cried out, as one does, both from pain and to call for help. Now snakes have the sharpest sight and hearing of all animals; and this particular snake heard the voice of its former companion, and hissing fiercely as though enraged, terrorised the bandits and filled them with fear; they were scattered in all directions, and some were caught by the snake and suffered a painful death. It then licked clean the injuries of its old friend and escorted him out of danger from wild animals, then went back to place where it had been released, showing no resentment at being abandoned; nor did it, as men will so ignobly do, stand by while its dearest friend was in danger.

COMMENT: There are many stories in antiquity of noble animals recognising their benefactors and returning friendship to humans, including dogs, elephants and lions (see LION no. 11), but the attribution of such noble motives to a snake is more unlikely. It is in keeping, however, with the otherworldly aspect of the snake, which was assumed to have preternaturally sharp senses and

a connection with the divine. Aelian tells two other similar stories of snakes in love with humans: at VIII.11 a snake is said to have been attracted by the beauty of a young shepherd, and at VI.17 of a young girl, though in the latter case the girl was repelled by the attentions of the snake. The species of snake described here is mysterious: it was probably an Asclepian snake, which is very docile, although it is not clear that this species grew particularly large in Arcadia; Lucian (*Alex.* 6) describes very large tame snakes in Macedonia. The keeping of snakes as pets is well attested, and they could be long lived: the philosopher Heracleides of Heracleia, according to Diogenes Laertius, had a pet snake which he kept throughout his life (V.89). The emperor Tiberius had among his pets a snake which he hand-fed (Suet. *Tib.* 72.2), and Martial (above no. 12) lists snakes among the many kinds of pets owned by Romans of his day, suggesting that women would coil them around their necks, though he is wrong in thinking that snakes are cold to the touch: they are in fact smooth and warm.

21. Garden tortoises

Shell of a tortoise from Pompeii, Antiquarium, Boscoreale (photograph by kind permission of Carlo Raso)



COMMENT: This shell, currently in the Antiquarium at Boscoreale, was found at Pompeii, though its precise provenance is lost. But at least four other sets of tortoise remains have been found in Pompeii, from the gardens of Roman houses: in the garden of the House of the Tragic Poet, the House of C. Julius Polybius, the House of the Ceii and the Villa of Poppaea (Bodson 2001: 332–4). What were these tortoises doing in Pompeian gardens? The Hermann's tortoise, *Testudo hermanni*, is native to Campania, but it is unlikely that they simply wandered in to browse the plants: Roman gardens were set within the house, enclosed by high walls, and tortoises would need to be deliberately introduced to live there. They were not being kept for food, since tortoises were not often eaten, and the shells indicate that they were alive until the moment of the eruption. Were they, as Jashemski (1979: 103–4) suggests, pets? Our only evidence for tortoises as pets comes from art, and is very sparse. Best known is the Apulian chous in the British Museum (F101) which shows a girl with a dog and a tortoise that she is suspending from a string tied round one of its legs (Calder 2011: pl. 14). This pot was made in Greek South Italy, but dates to the end of the fourth century BCE. The only piece of Roman-period evidence is a grave relief from Athens (now in the Louvre) depicting a boy with a bird, dog and tortoise (Dumoulin 1994: 138). Apart from these, there is a fragmentary Attic chous in Copenhagen which shows a very young girl with a tortoise, but this is also significantly before the first century BCE in date, and is the animal's only appearance among a multitude of birds and dogs. The tortoise is not named in literature as a pet that an adult might find rewarding, and it may be that tortoises were seen

as suitable pets only for the young: as Bradley (1998) has demonstrated, many pets were kept as much for fighting as for companionship (see SPORT no. 7; QUAIL no. 3), and the slow and silent tortoise which could neither fight nor perform did not offer the same interest to older children and adults. A third-century CE Roman mosaic in Volubilis, North Africa (Dunbabin 1978: 86–7) which depicts *erotes* fighting a tortoise in the arena perhaps plays on the link between childhood and the harmless tortoise.

22. Crickets and cicadas as pets

a) Greek Anthology VII.190 (*Anyte or Leonidas*)

For her cricket, the nightingale of the ploughed field,
and her cicada that dwelt in the treetops Myro made a single tomb,
shedding girlish tears. For both her pets
were snatched away by ill-omened Hades.

b) Greek Anthology VII.195 (*Meleager*)

Cricket, soother of my desires, encourager of sleep,
cricket, Muse of the ploughed field, chirping with your wings,
Nature's own lyre, play for me some song I love,
beating your chattering wings with your dear feet,
so that you may deliver me from cares and wakeful anxiety,
cricket, sounding your voice in a beguiling tune,
and in the morning I will give you a fresh green leek
and drops of dew sprayed from my mouth.

COMMENT: The first of these lyrics is an epitaph for two pets which have died, the second a poem to a pet still living, celebrating its musical ability. The *Greek Anthology* contains many epitaphs in verse, for animals as well as humans, and several, like this, are epitaphs for cicadas and crickets. Most commemorate pets, particularly crickets kept for their song at night – VII.197, for instance, mourns the cricket of Democritus, which made the house ring with its evening song – while a few are epitaphs for wild cicadas or crickets. There is plenty of evidence to show that crickets and cicadas were common pets in classical antiquity, especially for children – Theocritus (*Idylls* I.52) and Longus (I.10) show us children weaving cages for catching crickets, and the second poem above indicates how the cricket is fed and cared for (see further Borthwick 1966). The practice of keeping insect pets can easily be paralleled in the modern period, especially in Japan (Davies and Kathirithamby 1986: 138). The crickets or cicadas are not, however, individualised or named, although one is said to have belonged to a girl called Philaenis for two years (*Greek Anthology* VII.198).

Several of the epitaphs in the *Greek Anthology* refer to actual tombs for the deceased, either a humble clay pot or a grander monument, while others simply describe the insects' passage to Hades or their experience in the meadows of the afterlife. Can we believe that these verses reflect real beliefs and actions? It seems unlikely: while such pets might inspire some affection, and sorrow when they died, this must be limited since crickets and cicadas are short-lived creatures and unlikely to survive very long in captivity; the idea of building tombs for insects, with lyric epitaphs, and the description of their deaths in terms of descent to Hades are obviously exaggerated. But there are poetic reasons why such epitaphs are common, apart from the humour implicit in

creating a grand memorial for a small and insignificant creature. To compose a moving verse on so slight a subject is a demonstration of poetic virtuosity, and the traditional parallel between poet and cicada lends significance to the epigrams.

Bibliography

- B. Alster, *Proverbs of Ancient Sumer* (2 vols) (Bethesda 1997).
- L. Bodson, 'Motivations for pet-keeping in ancient Greece and Rome. A preliminary survey', in A. Podbersceck et al. (eds), *Companion Animals and Us. Exploring the Relationships Between People and Pets* (Cambridge 2000), 27–41.
- L. Bodson, 'Amphibians and reptiles: evidence from wall paintings, mosaics, sculpture, skeletal remains and ancient authors', in W. F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 327–56.
- E.K. Borthwick, 'A grasshopper's diet: notes on an epigram of Meleager and a fragment of Eubulus', *CQ* 16 (1966), 103–12.
- M. Bouvier, *Le lièvre dans l'antiquité* (Lyon 2000).
- K. Bradley, 'The sentimental education of the Roman child: the role of pet-keeping', *Latomus* 57 (1998), 523–57.
- K.R. Bradley, 'Animalising the slave: the truth of fiction', *JRS* 90 (2000), 110–25.
- D. Brewer, T. Clark and A. Phillips, *Dogs in Antiquity – Anubis to Cerberus. The Origins of the Domestic Dog* (Oxford 2001).
- J. Busuttill, 'The Maltese dog', *Greece and Rome* 47 (1969), 88–93.
- L. Calder, *Cruelty and Sentimentality: Greek attitudes to animals, 600–300 BC* (Oxford 2011).
- C. Clairmont, *Classical Attic Tombstones* (7 vols) (Kilchberg 1993).
- M. Davies and J. Kathirithamby, *Greek Insects* (Oxford 1986).
- N.D.G. Davies, *The Rock Tombs of El Amarna II. The Tombs of Panehesy and Meryra II* (London 1905).
- C. Desroches Noblecourt, *Ramses II* (London 2007).
- M.D. Donalson, *The Domestic Cat in Roman Civilisation* (Lewiston 1999).
- D. Dumoulin, *Antike Schildkröten* (Würzburg 1994).
- K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
- K. Durr, *Ancient Egyptian Names for Dogs* (Crawford 1996).
- D. Engels, *Classical Cats: the rise and fall of the sacred cat* (London and New York 1999).
- E. Fudge, *Pets* (Stocksfield 2008).
- R. Garland, *The Eye of the Beholder: deformity and disability in the Graeco-Roman world* (ed.², London 2010).
- I.S. Gilhus, *Animals, Gods and Humans: changing attitudes to animals in Greek, Roman and early Christian ideas* (London 2006).
- J. Goudsmit and D. Brandon-Jones, 'Evidence from the baboon catacomb in north Saqqara for a west Mediterranean monkey trade route to Ptolemaic Alexandria', *Journal of Egyptian Archaeology* 86 (2000), 111–19.
- K.J. Gutzwiller, 'Catullus and the Garland of Meleager', in I. Du Quesnay and T. Woodman, *Catullus: poems, books, readers* (Cambridge 2012).
- R. Hamilton, *Choes and Anthesteria: Athenian iconography and ritual* (Ann Arbor 1992).
- D. Haraway, *The Companion Species Manifesto: dogs, people and significant otherness* (Chicago 2003).
- J.C. Hoppin, *A Handbook of Attic Red-Figured Vases: signed by or attributed to the various masters of the sixth and fifth centuries B.C.* (Cambridge, MA 1919).
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- P.F. Houlihan, *Wit and Humour in Ancient Egypt* (London 2001).
- S. Ikram, 'The pet gazelle of one of the Pinudjem ladies', *KMT. A Modern Journal of Egyptology* 11 (2) (2000), 58–61.
- S. Ikram, 'Divine creatures. Animal mummies', in S. Ikram (ed.), *Divine Creatures. Animal Mummies in Ancient Egypt* (Cairo 2005a), 1–15.
- S. Ikram, 'Protecting pets and cleaning crocodiles. The Animal Mummy Project', in S. Ikram (ed.), *Divine Creatures. Animal Mummies in Ancient Egypt* (Cairo 2005b), 207–27.
- S. Ikram, *Beloved Beasts. Animal Mummies from Ancient Egypt* (Cairo 2006).
- J. Janssen and R. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- W.F. Jashemski, *The Gardens of Pompeii, Herculaneum and the Villas Destroyed by Vesuvius* (New Rochelle 1979–93).

- C. Johns, 'The tombstone of Laetus' daughter: cats in Gallo-Roman sculpture', *Britannia* 34 (2003), 53–63.
- K.F. Kitchell, *Animals in the Ancient World from A to Z* (London 2014).
- K.A. Kitchen, *Pharaoh Triumphant. The Life and Times of Ramesses II* (Warminster 1982).
- S. Lewis, 'A lifetime together? Temporal perspectives on animal-human interactions', in T. Foegen and E.V. Thomas (eds), *Interactions Between Animals and Humans in Antiquity* (Berlin 2017).
- M. Lichtheim, *Ancient Egyptian Literature Vol.1: the Old and Middle Kingdoms* (Berkeley 1973).
- M. MacKinnon and K. Belanger, 'In sickness and in health: care for an arthritic Maltese dog from the Roman cemetery of Yasmina, Carthage, Tunisia', in L.M. Snyder and E.A. Moore (eds), *Dogs and People in Social, Working, Economic or Symbolic Interaction* (Oxford 2006), 38–43.
- J. Malek, *The Cat in Ancient Egypt* (Philadelphia 1997).
- J. Oakley, 'Death and the child', in J. Neils and J.H. Oakley, *Coming of Age in Ancient Greece: images of childhood from the classical past* (New Haven and London 2003), 163–94.
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- G.A. Reisner, 'The dog which was honoured by the King of Upper and Lower Egypt', *Bulletin of the Museum of Fine Arts* 34.206 (1936), 96–9.
- L. Robert, 'Les colombes d'Anastase et autres volatiles', *Journal des savants* 2 (1971), 81–105.
- A. Schnapp, 'Eros the hunter', in C. Berard et al., *City of Images: iconography and society in ancient Greece* (trans. D. Lyons) (Princeton 1989), 71–87.
- V. Spinazzola, *Pompei alla luce degli scavi nuovi di Via dell'Abbondanza (anni 1910–1923)* (2 vols) (Rome 1953).
- Å. Strandberg, *The Gazelle in Ancient Egyptian Art. Image and Meaning* (Uppsala 2009).
- R.F. Thomas, *Reading Virgil and his Texts: studies in intertextuality* (Ann Arbor 1999).
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- L. Troy, *Patterns of Queenship in Ancient Egypt* (Uppsala 1986).
- A.W. Van Buren and R.M. Kennedy, 'Varro's aviary at Casinum', *JRS* 9 (1919), 59–66.
- J.E. Veevers, 'The social meaning of pets: alternative roles for companion animals', in M.B. Sussman (ed.), *Pets and the Family* (New York 1985), 11–30.
- G.E. Watson, 'Birds: evidence from wall-paintings, mosaics, sculpture, skeletal remains and ancient authors', in W.F. Jashemski and F.G. Meyer (eds), *The Natural History of Pompeii* (Cambridge 2001), 357–400.
- L. Watson and P. Watson, *Martial: selected epigrams* (Cambridge 2003).

6

SPORT

A great deal of brutal treatment was meted out to animals in the name of sport in the ancient world. Animals were hunted, not solely for food, but for the pleasure of chase and kill; they were made to fight their own or other species as entertainment; they were kept in captivity in unsuitable or painful conditions; they were trained, often with cruelty, to perform. The sources collected here, and in other sections of this book, sometimes make difficult reading, describing animals which were injured, traumatised or goaded into unnatural behaviour; even when human actions were not deliberately cruel, ignorance of animals' needs led to much suffering: MacKinnon (2006) has demonstrated the shockingly high death rates among exotic animals imported to Rome, and we also find animals such as lions, leopards, bears, monkeys and wolves displayed in early menageries, where they were kept in barred cages or pits with no hint of a natural habitat, were fed inappropriate food and had little opportunity or space to engage in natural behaviours or to interact with others of their own species (see Höfele 2011 for interesting analysis based on Early Modern practices).

It is not a sufficient explanation to say that the attitudes which led to such wanton cruelty were simply the result of ignorance and the generally harsh nature of ancient life. Certain aspects of ancient cultures created an effective 'war on animals', of which many of the examples collected here are manifestations. In the first place, the natural world was seen as intrinsically hostile to humans. It was taken for granted that the relationship between humans and other animals was one of antagonism: wild animals were the enemies of civilised life (see HUMAN nos 1 and 13, TAXONOMIES no. 4). As a result the treatment of animals became an expression of human power and domination. Control of the animal world was a visible part of political power, and nowhere was this more clearly expressed than in the Roman arena. In the Colosseum at Rome and in countless smaller amphitheatres across the provinces, animals were brought in their tens of thousands to be killed as entertainment, a pastime literally soaked in blood. Animals were brought from across the expanding empire to die for the amusement of the Roman public, demonstrating the wealth, reach and power of Rome and its emperors (Lindstrom 2010; Kyle 1998). That humans (gladiators, criminals and martyrs) died alongside animals in such shows emphasises the intensely hierarchical nature of ancient societies.

Of all animal-related entertainments, the hunt had the widest cross-cultural appeal. Ancient authors celebrate the exploits of the hunt not only for its benefits to health and happiness but as a symbol of manliness; the ancient nexus between hunting and warfare was clear to see, and

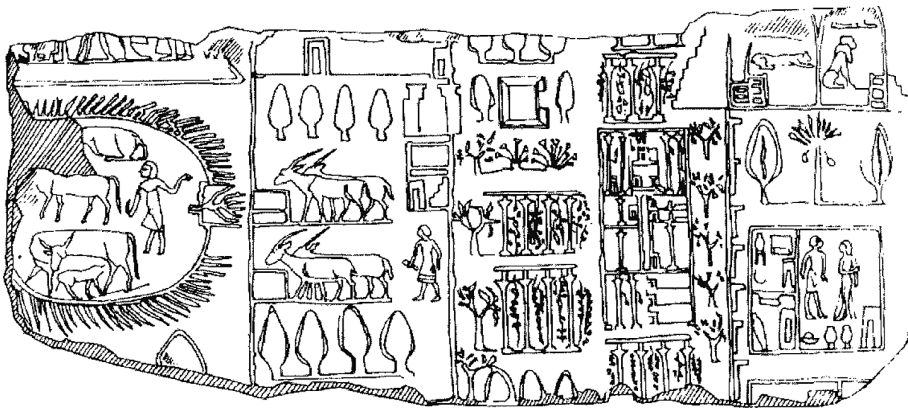
while modern day big game hunters obviously have little in common with Ashurbannipal or the emperor Hadrian, Xenophon's method of hunting small game can still find resonances in the exploits of modern fox hunters or even poachers. Economic hunting was practised in antiquity, of course, but beyond the necessity of hunting to obtain food, pleasure, status and power were to be had from hunting as sport (Anderson 1985; Allsen 2006).

Bizarrely, in its own way hunting was less of a sport *per se* than an art form, for hunting was not simply a matter of killing animals. A successful hunt had to end in an animal's death, it is true, but it had to be a specific type of animal that was killed, and it had to be slaughtered in a particular way; it must have been free to flee its predator, or turn and attack the hunter but it also must have been killed deliberately – and with violence (but there could be no use of traps, poisoned baits or nets). But more than anything else, the hunter's prey had to be a *wild* animal (even if temporarily captured) with every chance of being hostile to the hunter, and it could not be thought to have been tame or docile around humans. For the elites of successive ancient (and more contemporary) societies, the hunt became an elaborate ritual with its own vocabulary and ceremonial which served to validate the aristocratic credentials of the hunters, for the court hunt had nothing to do with providing for economic necessity – it was predominantly a political and ideological activity and the countless depictions of the hunt commissioned by the wealthy demonstrate its centrality in ancient culture (Allsen 2006; Bates 2013; Lane Fox 1996).

ENTERTAINMENT

1. Akhenaten's zoo

Talatat block from Karnak, Egypt, XVIII Dynasty



COMMENT: This stone block from the Aten temple at Karnak in Upper Egypt carries a relief representation of a garden containing different kinds of animals in pens, overlooked from terraces or balconies at various points and from a central large pavilion; it appears to be a kind of 'royal zoo' (see Anus 1971 and Llewellyn-Jones forthcoming). The perspective on the garden is a bird's eye view, looking down from above, with significant features such as people, animals and trees shown in profile, as well as architectural elements such as columns, stairs and windows. To the left of centre is a compound with trees housing antelopes which feed from a trough; at the far

left cattle and calves are penned in a stockade, accompanied by an overseer. At the upper right of the scene, near the enclosure wall, are two domed pens touching each other, one with a seated male lion below and (probably) a lioness above (although only her feet are preserved), and the other with a reclining lioness; there is room at the top of this pen for other felines too, although they are not preserved. Flight of stairs of different heights lead to each pen, one outside the enclosure wall and the other inside it, leading to what have been interpreted as wooden doors in each pen and to what is probably a high raised balcony of lattice-work, specifically used for viewing the animals. The pens are made to look like domed houses, but this may be a stylisation of the sunken cages or pits. It is difficult to determine the depth of any of the pens or the height of a viewing area, although Janssen and Janssen (1989: 57) compare the Amarna lion pens to Medieval and Renaissance bear pits such as the example which survives in Berne, Switzerland.

2. Animal magic at the pharaoh's court

Westcar Papyrus (Papyrus Berlin 3033), possibly Hyksos period, c. eighteenth to sixteenth century BCE

Prince Hordjedef said (to the king): 'There is a man named Djedi, who lives in Djed-Snofru. He is a man of 110 years (of age), but he eats 500 loaves of bread, the side of an ox for meat and he drinks 100 jugs of beer to this day. He can join a severed head, he can make a lion walk behind him with its leash on the ground and he knows the number of secret rooms in the sanctuary of Thoth.'

Now the Majesty of the King of Upper and Lower Egypt Khufu, justified, had spent days in looking for these secret chambers of the sanctuary of Thot, in order to build something similar for his tomb and thus he spoke: 'You yourself, Hordjedef my son, shall bring him to me' . . .

Now then, after he had reached the residence, prince Hordjedef entered in to report to the Majesty of the King of Upper and Lower Egypt, Khufu, justified. Prince Hordjedef said: 'Sovereign, my Lord, I have brought Djedi'.

And His Majesty said: 'Go and bring him to me'.

His Majesty went to the columned forecourt of the palace and Djedi was sent to him. His Majesty then said: 'How is it, Djedi, that I was never made to see you?'.

And Djedi said: 'It is he who is summoned, who comes, Sovereign. I have been summoned and behold, I have come'.

Then His Majesty said: 'Is it true what one says? Can you join a severed head?'

And Djedi said: 'Yes, I can, Sovereign, my Lord'.

Then His Majesty said: 'Have a prisoner brought to me from the prisons, so that he may be executed'.

But Djedi said: 'Not, pray, with a human being, Sovereign, my Lord! Behold, it cannot be commanded that one does this to the noble cattle'.

And so a goose was brought to him. Its head was cut off and the goose was placed on the West side of the columned hall while its head was on the East side of the columned hall. Then Djedi said his magic spell and the goose stood up waddling, its head doing the same. Now then, after one had reached the other, the goose stood up cackling.

Then he had a long legged bird brought to him and the same was done to it. Then His Majesty had a bull brought to him. Its head was cut off on the floor and Djedi said his magic spell. The bull stood up behind him and it . . . that which had fallen to the floor.

Then king Khufu, justified, said: 'It is also said that you know the number of secret chambers of the sanctuary of Thoth'.

COMMENT: The Westcar Papyrus is the first known account of a magic trick. It recounts how the pharaoh Khufu (or Cheops), the builder of the Great Pyramid at Giza, asks a wise man and magician named Djedi to entertain him. The magician cuts the heads off a goose, a water bird and an ox and then restores them to life, though he refuses to do the trick on a human prisoner. The trick, an optical illusion, is still performed by magicians today, although only birds are used: a bird can be manipulated easily, its head folded back under the wing as the conjurer produces, by sleight of hand, a prosthetic or stuffed bird head, thereby giving the impression that the bird has been decapitated. Djedi's ability to decapitate and restore the head of a bull is no doubt literary hyperbole.

3. Snake charmers

a) Ugaritic liturgy against a snake bite (RŠ 24.224=UT 507)

My incantation for serpent bite, for the scaly serpent's poison:
From it, O charmer, destroy, from it cast out the venom!

Then he binds the serpent, feeds the scaly [serpent], draws up a chair and sits. . .

He casts a tamarisk (from) among the trees, the 'tree of death' (from) among the bushes.

With the tamarisk he expels it (the venom), with the fruit stalk of a date palm he banishes it, with the succulent part of a reed he makes it pass on, with the 'carrier' he carries it away.

Then Horanu goes to his house, arrives at his court. The venom is weak as though (in) a stream, is dispersed as though (in) a canal. . .

b) Hebrew bible, Psalm 58.3–5

Even from birth the wicked go astray;
from the womb they are wayward, spreading lies.
Their venom is like the venom of a snake,
like that of a cobra that has stopped its ears,
that will not heed the tune of the charmer,
however skilful the enchanter may be.

c) Hebrew bible, Ecclesiastes 10.11

If a snake bites before it is charmed,
the charmer receives no fee. . .

d) Hebrew bible, Jeremiah 8.17

'See, I will send venomous snakes among you,
vipers that cannot be charmed,
and they will bite you,'
declares Yahweh.

COMMENT: Evidence for professional snake charmers who performed as entertainers, as miracle-workers and as pest-control experts exists from across the Near East, but some of the best testimony emerges from Levantine sources: the Hebrew bible and Canaanite and Ugaritic mythological narratives. In 1968 the incantation against snakebite from Ugarit (a) was published and few Levantine texts have subsequently aroused as much discussion. Three known Ugaritic texts deal with the problem of venomous serpents: the one quoted here, taken from the end of a very long and repetitive text, is very fragmentary and consists of three sections. It tells how a mare, seeking a vanquisher of venomous serpents, sends a pleading message to twelve gods, all important members of the Ugaritic pantheon. Only the twelfth god, Horanu, responds effectively and performs a ritual cited here that renders the serpent's venom harmless. There is a brief recitation of an incantation in which Horanu is likened to a snake charmer.

Traditional snake charmers play a pipe in order to hold the attention of the snakes by its swaying movements, although the Ugaritic word for 'charmer', *mlḥš*, which is cognate with the Hebrew words for 'snake charmers', reveals that, literally, these were 'snake whisperers'. The Ugaritic text does in fact give focus to the ritual 'binding' of the snake, a kind of 'bewitchment' similar, perhaps, to the modern snake-charming practice of hypnotism by rhythmic actions. Moreover, it is highly likely that the duties and expertise of an ancient Near Eastern snake charmer in Mesopotamia overlapped with those of the *āšipu* (exorcist).

Professional snake charmers exhibit their skills by performing with tamed serpents of an extremely venomous species, usually cobras, which they handle with complete imperviousness; even so, in parts of modern Iraq and India it is sometimes a practice of the snake charmer to remove the fangs of a poisonous snake (Corkill 1939), and a similar practice seems to be suggested in the Ugaritic text and in corresponding evidence preserved in Sumerian contexts by the proverb, 'A snake charmer had a snake. He pulled out the tooth. . .' In the Ugaritic snake charm-text it is apparent that the practice of removing the venom gland of the serpent was something of a trade secret.

ANIMAL FIGHTS

4. Cockfighting

a) *Aelian Varia Historia II.28*

After the Persian Wars the Athenians passed a law requiring that cockfights should be staged at public expense once a year in the theatre. The origin of this law is as follows; when Themistocles was leading the Athenian army against the Persians, he happened to see some cocks fighting. He did not look on them idly, but halted the army and said to them, 'These birds are not fighting in defence of their country, nor for their ancestral gods, nor again are they enduring pain in defence of the tombs of their forebears, nor for glory or for freedom, nor for the sake of their children: they are fighting so as not to be beaten by their rival, and because each refuses to submit to the other.' With this observation Themistocles gave heart to the Athenians; and since the cockfight had served as a symbol of courage for them on that occasion he wished to maintain it as a reminder for similar circumstances in the future.

b) Scene from an Attic red-figure bell krater with cock fight, Warsaw, National Museum no. 198512, c. 440 BCE, attr. Menelaos Painter (drawing © Paul Butler)

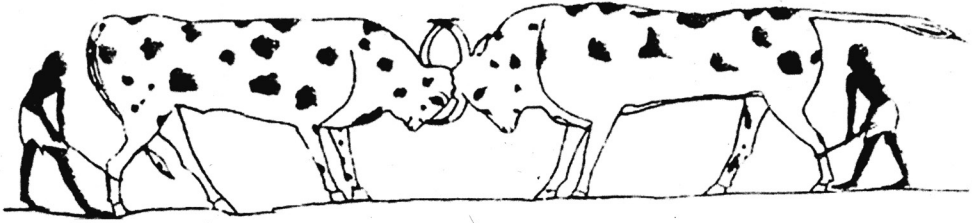


COMMENT: The cock was not, for the Greeks, foremost a barnyard fowl: it was introduced as a fighting bird and was reared primarily for this pursuit – Columella (*De re rust.* VIII.2.4–5) describes the Greek breeds of cock as bred wholly for size and aggression in fighting (Csapo 1993: 9). Cockfighting is a violent and bloody sport (see Serjeantson 2009: 325–31) – the scholiast to Aristophanes’ *Birds* 759 notes that metal spikes were attached to the cocks’ spurs to aid their attacks – and the story above, told variously of Themistocles and Miltiades, reflects the Greek admiration for the cock’s willingness to fight to the death, representing the ultimate in warlike aggression: a similar law is attested in Pergamum in Pliny’s time (Plin. *NH* X.50; Csapo 1993: 9–11). Cockfighting thus functioned as socialisation for war, and Bradley, in a study of pet-keeping at Rome, points out that despite its bloody nature, cockfighting was considered an appropriate pastime for young boys, illustrating terracottas and sculptures which depict very young children pitting their birds in combat (Csapo 2006/7; Bradley 1998: 545–52, figs. 16–18). We do have evidence that fighting cocks were named, and if successful could become esteemed, but given that fights were often fatal there can have been no expectation that a fighting cock could attain the sentimental status of a pet.

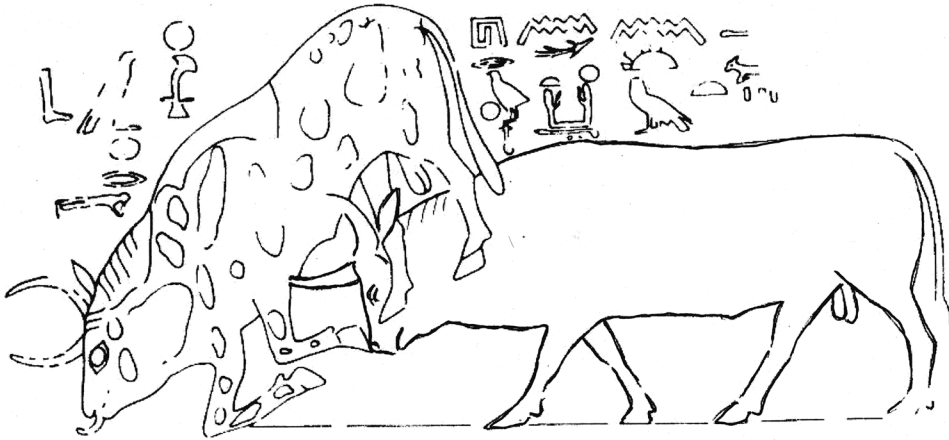
The Roman taste for violent spectacle probably explains why Roman art includes more depictions of actual fights, or of victor and defeated rival in the aftermath of a fight, whereas Greek art is more likely to show cocks facing each other before combat, or the cock as a gift between lovers, symbolising both wealth and leisure, and the erotic connotations of the cock’s well-known sexual enthusiasm (Ar. *HA* 488b 4, 637b 7–8).

5. Bull-fighting

a) Tomb of Khety at Beni Hassan, XI Dynasty



b) Tomb of Mery-aa at El-Hagarsa, early VIII Dynasty



COMMENT: These tomb scenes, in vogue between the VI and XVIII Dynasties, represent fights between two adult bulls; no fewer than twenty-seven such scenes are known. The tomb of Khety depicts two dappled bulls clashing horns; two herdsman, represented unrealistically on a much smaller scale than the bulls, are hitting them with sticks on their hind legs (rather than tethering them by ropes, as has been suggested). It would appear that bull fights of this type were arranged and arbitrated by two herdsman, who drove their bulls to face each other, beating them with sticks on the horns or on the hind legs to enrage them and provoke them to fight. The victor would be held to be the best male for breeding from among the stud-bulls. Strabo (*Geog.* XVII.31) describes the practice at Memphis in his own time, centuries later: 'It is the custom to hold bullfights in this *dromus*, and certain men breed these bulls for the purpose, like horse-breeders; the bulls are set loose and join in combat, and the one that is regarded as victor gets a prize.' Jones (2012: 100) suggests that bull fights were organised primarily as elite sport and that a class of bulls was bred especially for the sport. Some representations of bulls engaged in a fight, however, lack the presence of herdsman (e.g. b above) and seem to be simply observations of bulls' natural behaviour in the wild.

Sport involving bulls took different forms in different cultures, from Minoan bull-leaping (Younger 1995) to the beast fights of the Roman arena. The Egyptians appear to have been

unique, however, in pitting bulls against each other; in Roman arena games bulls were either hunted by humans – Pliny refers to specialist bullfighters from Thessaly (*NH* VIII.182) or set to fight other animals. Fights between bulls and lions, bears or even elephants are recorded, and the combat of bull and bear seems to have been a standard: a gladiator mosaic from Zliten in Libya depicts a bull and bear chained together to fight to the death (Dunbabin 1978: fig. 48; see BEAR no. 5). Three named fighting bulls appear on the Cos gladiator mosaic (below), and another on a Roman mosaic pavement from Rudston in Yorkshire (Toynbee 2013: 150–1). For a troupe of performing cows, see OX no. 16.

6. Boar in the arena

*Mosaic, House of Silenus, Cos, late second century CE
(photograph reproduced by kind permission of Prof Christine Kondoleon).*



COMMENT: Wild boar were an extremely common component of *venationes* in the Roman arena: while our sources may concentrate on exotic African and Asian animals which were imported at great expense, native beasts such as boar, deer and bulls formed the backbone of any show, and many may have presented only local animals (Jennison 2005: 43). The boar, fierce and fearless, appears in many sources both written and visual: they were hunted and killed by *bestiarii*, pitted against other animals or even fought each other (Martial *De Spect.* 15; Dio LXXVI.1; Toynbee 2013: 133–4). The above mosaic from Cos is one of the most striking depictions of wild boar in the arena, as all three shown in combat with the *bestiarii* are named – they are called Gorgonis, Polyneices and Solon. Named animals in the amphitheatre are relatively common (see LEOPARD no. 5; WORKING ANIMALS no. 13) and are an indication that the artist was representing a specific event (Kondoleon 1991: 109): it also suggests that the animals in the entertainment were not simply disposable spear-fodder, but were presented as individuals, pitted against named *bestiarii* or each other, and kept from one contest to the next to attract an audience and allow for betting, a practice which would make financial sense for the organisers.

As well as native boar, more exotic breeds of pig were occasionally seen at Rome: Calpurnius Siculus *Ecl.* VII.58 refers to the ‘horned boar’ seen in the time of Nero, usually understood to be the warthog (cf. Ael. *NA* XVII.10).

7. Lion-baiting

(a) Diodorus Siculus, Library of History XVII.92

To Alexander he [Sopeithes] presented many impressive gifts, among them one hundred and fifty dogs remarkable for their size and courage and other good qualities. People said that they had a strain of tiger blood. He wanted Alexander to test their mettle in action, and he brought into a ring a full grown lion and two of the poorest of the dogs. He set these on the lion, and when they were having a hard time of it he released two others to assist them. The four were getting the upper hand over the lion when Sopeithes sent in a man with a scimitar who hacked at the right leg of one of the dogs. At this Alexander shouted out indignantly and the guards rushed up and seized the arm of the Indian, but Sopeithes said that he would give him three other dogs for that one, and the handler, taking a firm grip on the leg, severed it slowly. The dog, in the meanwhile, uttered neither yelp nor whimper, but continued with his teeth clamped shut until, fainting with loss of blood, he died on top of the lion.

COMMENT: Animal-baiting of many sorts has been a common feature of human civilisation across the millennia (Brooke-Hitching 2015: 140–2): dogs, rats, bulls, monkeys, bears, birds and even men might be used for this bloody sport, although Diodorus was among the first authors to describe how dogs were set upon a captive lion for the entertainment of Alexander of Macedon and his men. Aelian tells a more exaggerated and gruesome version of the same story, in which the dog is gradually cut to pieces, refusing to release its grip on the lion until only its head remained (NA VIII.1). Sopeithes, king of India, provided this spectacle as part of a court entertainment, and indeed throughout history lion-baiting has tended to be the preserve of kings and courts; Herodotus describes the Persian king Cambyses staging a fight between a puppy and a lion-cub to entertain his court (III.32; see Horman 1999).

HUNTING

8. A poem: *The Hunter*

Akkadian 'student-text' of a poem, possibly reign of Tiglath-Pileser I, 1114–1076 BCE (after Foster 2005: 336)

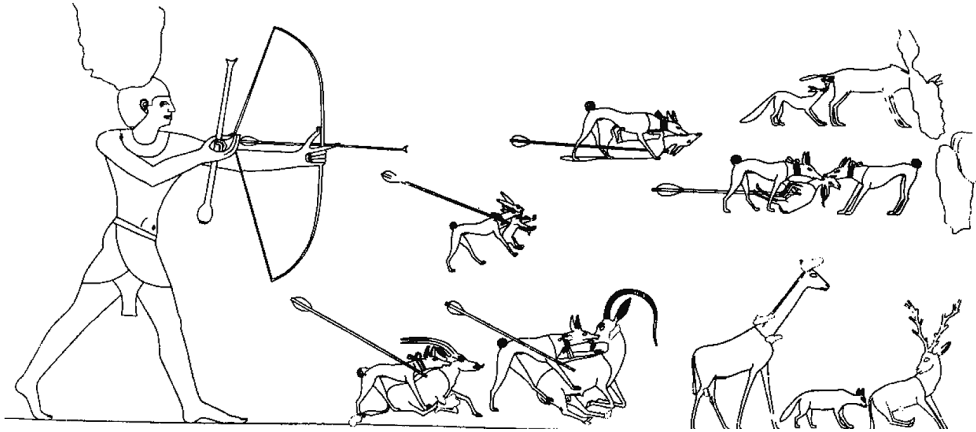
[Who curbs] foes, trampler of his enemies,
 [Who hunts] mountain donkeys,
 flushes the creatures of the steppe,
 [The Hunter]: Assur is his ally, Adad is his help,
 Ninurta, vanguard of the gods, [goes before him].
 The Hunter plans battle against the donkeys,
 He sharpens (?) his dagger to cut short their lives.
 The donkeys listened, they gambolled alert,
 The Hunter's terror had not come down upon them.
 They were bewildered, 'Who is it that stalks us?
 Who is it, not having seen who we are,
 Who tries to frighten us all?

Our . . . will cut off the high mountains,
Our dwelling place lies in the . . . of the mountain.
Let the wind send flying the hunter's snare!
May the shootings (?) of his bow
 not rise high enough to reach(?) (us) assembled!'
The Hunter heard the chatter of the mountain beasts –
Their speech was anxious, their words troubled,
 'Mouth or muscles, men are what they're born!' –
To the warriors who will make the breaches (?)
 over the mountain he says,
'Let us go and bring massacre upon the mountain beasts,
With our sharpened (?) weapons we will shed their blood.'
He performed an extispicy for his appointed time,
He raged like a thunderstorm,
 (like the) sun he was hitching up his chariotry.
A journey of three days he marched [in one].
Even without sunshine a fiery heat was among them,
He slashed the wombs of the pregnant, blinded the babies,
He cut the throats of the strong ones among them,
Their troops saw (?) the smoke of the (burning) land.
Whatever land is disloyal to Assur will turn into a ruin.
Let me sing of the victory of Assur, the mighty,
 who goes out to [combat],
Who triumphs over the cohorts of the earth!
Let the first one hear and te[ll it] to the later ones!

COMMENT: *The Hunter* is a short epic poem about a military campaign waged by an Assyrian monarch (probably Tiglath-Pileser I) against mountain nomads but cast as a metaphor in which a hunter stalks wild game (Pongratz-Leisten 2015: 252–4). The text was a well-known school exercise and a popular fable, yet has no direct parallel in Akkadian literature. The hero remains anonymous throughout and is simply referred to as the 'hunter' (*bajjāru*), but in reality it is the king himself. His adversaries, the wild asses of the mountains, represent the nomadic peoples whom the king is determined to bring under his rule. They are vividly depicted and are under the illusion that they are strong enough to defend themselves, until the reality of their perilous situation strikes them. Of course, with the help of the gods, the king sets out on a successful campaign, reaches the enemy land and slaughters the inhabitants – depicted now as humans – not even sparing the pregnant women or the children. The obvious nexus between the hunt and warfare and between animal and foreigner is confidently played with by the unknown author of this remarkably hard-hitting poem.

9. Egyptians hunting desert game

a) Line drawing after a wall relief in the tomb of Ukhotepe I at Meir, XII Dynasty



b) Line drawing after a wall relief in the tomb of Ptahhotep, V Dynasty



COMMENT: Deer and antelope were unsuited to domestic training or to labour, as the XX Dynasty Papyrus Lansing makes clear: 'You are worse than the desert antelope that lives by running. It spends no day ploughing. Never at all does it tread on the threshing floor. It lives on the oxen's labour, without entering among them' (Lichtheim 1976: 169). Because of this, all forms of desert cervids (see DEER no. 3) were regarded as the ultimate prey for hunting by the Egyptian elite, who frequently represented scenes of the sport in their tombs. Ukhotepe I's tomb at Meir shows gazelle, oryx and ibex being felled by *tjesm* hunting dogs which seem to tear at them ferociously. Many of the antelope have been pierced with Ukhotepe's arrows. Other details in the

scene show the natural life of the wilderness: a young fawn is snatched from its mother as it is born by a fox or jackal, a giraffe wanders aimlessly around, and a large buck sporting impressive antlers (a very unusual sight in Egyptian art; see DEER no. 3) turns towards an over-curious fox.

The tomb scenes are packed with naturalistic detail, but they had another function too. Houlihan (1996: 43) suggests that their purpose was to magically provide the tomb-owner with game that could be drawn upon to continue these recreational pursuits in the afterlife: 'This bounty would be further preserved . . . through the representation of beasts mating, giving birth (some females drop their young during the hunt out of sheer panic) – presumably reproducing to ensure an endless supply of their kind for all time.' Accordingly, in the tomb of Nimaatre at Giza, depictions of animal procreation are accompanied by hieroglyphic tags: 'The copulating of the oryx, the copulating of the jackals, [the copulating] of the weasels, the copulating. . . , the copulating of the hyaenas, the copulating of the addax, the copulating of the lynx.'

The tomb hunt-scenes, moreover, served a ritual purpose. Evil and adverse forces, represented by the wild animals living beyond the borders of civilisation, were forced into submission by the elite huntsman or, of course, by the pharaoh himself. In his V Dynasty tomb, for instance, Ptahhotep, his *tjesm* hounds leashed by his side, squats on the ground and extends his hand and points his index finger in a magical gesture, as if mastering the scene of carnage before him. Thus, through the chaos of the hunt, cosmic order is assured.

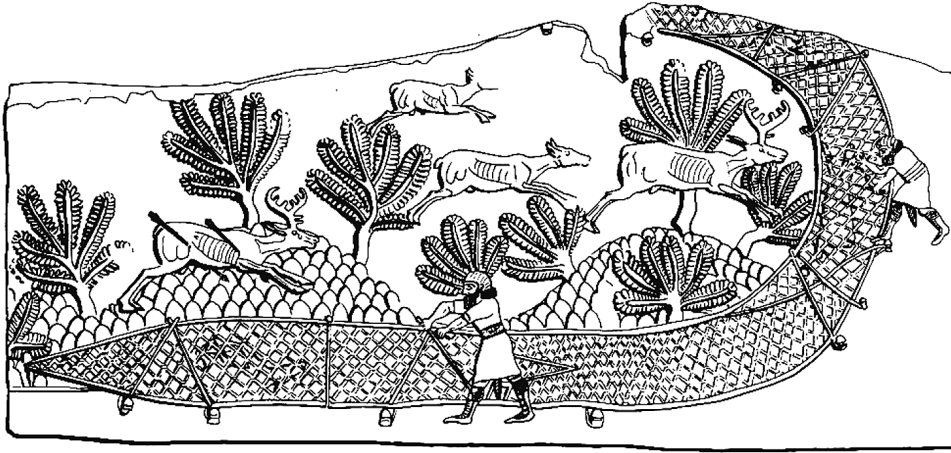
10. Hunting in the open field

a) *Xenophon, Cyropaedia I.4.5–15 (extracts)*

[Cyrus] before too long had exhausted the supply of animals in the park by hunting, shooting, and killing them, so that Astyages could no longer supply animals quickly enough for him . . . [Cyrus said to Astyages], 'How foolish it is to hunt game in a park. It seems to me that it was like hunting trussed-up game: for in the first place they were in a confined space, and moreover, they were lean and mangy; one was lame, another maimed. But the animals out on the mountains and plains – how fine they look: big and sleek!' . . .

Wishing to bring [Cyrus] joy Astyages took him out hunting; he had gathered together a group of boys and a large party of men on foot and horseback, and after he had driven the wild animals out into the country best suited for riding, he instituted a great hunt. And as he was to be present himself, he issued a royal command that no one should throw a spear before Cyrus had had his fill of the chase. But Cyrus did not permit this interference, saying, 'Grandfather, if you want me to enjoy the hunt then let all my comrades give chase and try to outdo one another, each doing his very best!' And so Astyages acquiesced and from his position he watched them rushing upon their animal foes, vying eagerly with each other in giving chase and throwing their spears. He was delighted to see that Cyrus was unable to keep silent from delight, but like a well-bred hound, he cried out when an animal came close and urged on each of his companions by name. And the king was delighted to see him laugh at one and praise another without the least bit of jealousy. At long last Astyages returned home with a quantity of game and he was so happy with the hunt that thereafter, whenever possible he went out with Cyrus and took along with him many others, including the boys, for Cyrus' sake.

b) Line drawing of a relief from the North Palace of Ashurbanipal at Nineveh, c. 669–627 BCE, London, British Museum BMWA 124871 (after Keel 1978: 94)



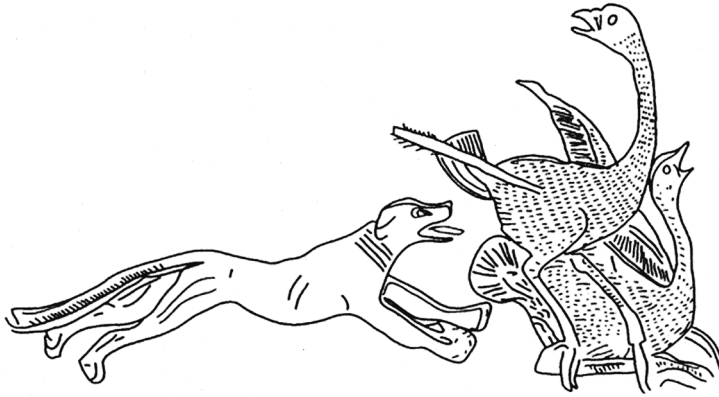
COMMENT: In the Near East royal hunts took place in game reserves (the fabled *paradeisoi* of Persia) or in the open field. Xenophon suggests that the best thrill could be had when hunting game in the wild, and this may well have been so because game-park hunting meant chasing prey which had been captured and brought into the locale specifically to be killed. An event of this kind may have lacked the frisson of danger of hunting in open terrain, but the symbolic execution of the hunted creature was the most important part of the hunt and in many cases this simply led to the time-saving method of pre-capturing animals to be executed by the monarch later, as often seen in Neo-Assyrian palace reliefs. This in turn confirmed the importance of game-parks where captured animals were brought and released, and of fenced-off hunting grounds.

Every royal hunt was meticulously planned under the charge of court officials who were responsible for procuring wild animals (if in a *paradeisos*) and training and caring for the huge mastiff dogs which accompanied the hunting party. Grooms and stablehands were needed for the horses, and bodyguards were ever-present because on a hunt the Great King's life was particularly vulnerable (as noted by Hdt. III.30 and Aelian, *Historical Miscellany* VI.14). Courtiers tasked with organising the hunt had every chance of elevation to the highest court offices.

Neo-Assyrian and Persian monarchs not only kept red deer in royal hunting parklands, but also hunted them in the wild, especially in the forested mountains, as vividly shown in this slab from the North Palace of Ashurbanipal at Nineveh, a detail from a once larger (and now lost) composition of hunting scenes (Albenda 2008: 68–9). The relief clearly shows the range of equipment needed for a royal deer hunt as well as the process of the chase itself. In the wild, once a herd had been located by scouts it would have been hunted with dogs. Successful royal hunts also required military personnel to be involved as 'beaters' to flush out the prey. Monarchs tended to participate in the so-called 'ring hunt', a formation which involved a large number of people to eliminate the problem of chasing the prey; cornered by a diminishing circle of hunters, the prey tended to panic and the monarch could then enter the ring to symbolically dispatch the animal. A refinement of this was the idea of 'fencing' (a variation on the so-called 'desert kites'), where large nets, of the type seen in the relief, might be employed by a section of the military to literally fence off an area, such as an entire mountainside, to force the prey to confront the king and his courtiers.

11. A royal ostrich hunt

Line drawing of a detail from the base of an ostrich-feather fan, tomb of Tutankhamun, XVIII Dynasty (after Brewer, Clark and Phillips 2001: fig 3.11)



COMMENT: Ostriches were present throughout all of Egypt at the beginning of the pharaonic era, although the bird is not very often shown in desert hunting scenes in Old Kingdom art. On the bas-reliefs and paintings from the beginning of the Middle Kingdom to the New Kingdom, however, the ostrich is frequently depicted in hunts organised for the pleasure of nobles and kings. The benefits of ostrich hunting were manifold: apart from the thrill of the chase, ostrich meat, noted for its delicate taste and its tenderness, was generally prized as a fancy food, and the flesh of chicks was also eaten. Ostrich meat was considered by the Egyptians to be an energising meat, and in Egyptian medicine ostrich fat was recommended against disorders of the scalp. Ostriches also provided the Egyptians with highly desirable feathers (see OSTRICH no. 2).

This detail, taken from a wooden handle of a gilded fan belonging to the young pharaoh Tutankhamun, shows the king hunting ostrich from his horse-drawn chariot. His *tjesm*-hound (see DOG no. 1) pounces; one ostrich has stumbled and the other has been wounded in the thigh by an arrow. Both birds are juveniles (they have reduced tail plumes when compared with adults) yet in spite of their youth they would have provided Tutankhamun with ample sport since even ostrich chicks can run at thirty-five miles per hour (Houlihan 1986: 1).

12. The ostrich-hunt as spectacle

*Mosaic, Sicca Veneria, North Africa, third century CE
(drawing by Tessa Rickards)*



COMMENT: This floor mosaic, ingeniously composed to fit an awkward space in a wealthy villa in Sicca Veneria (modern El Kef), shows a group of twenty ostriches in an enclosure, with attendants about to unleash hunting dogs on them and the antelope at the top of the scene. The ostriches are almost life-size and are very accurately depicted in both posture and behaviour. The scene is clearly one of *venatio*, the hunting of animals as entertainment in the amphitheatre, and Dunbabin (1978: 69) suggests that it commemorates a *munus* given by the owner of the villa by putting on a show in the local amphitheatre. Practically all Roman references to ostriches are to hunting, whether as private or public entertainment: they first appear in Roman literature in the second century BCE, when Plautus *Persa* 199 refers to an ostrich hunted in the arena, and they became a frequent import to the Roman games from this period on – the Great Hunt mosaic from Piazza Armerina in Sicily shows ostriches being carried on board ship for transport to Rome. Many of the accounts of ostrich *venationes* are particularly bloodthirsty – the emperor

Commodus is said to have used arrows with special crescent-shaped heads to decapitate them, and to have threatened the senators present at one show by holding up an ostrich's severed head as an indication of what he could do to them (Herodian I.15.5; Dio LXXIII.21.1–2). The sheer number of ostriches described in Roman sources, both as arena beasts – a thousand were shown by the emperor Probus in the third century CE (SHA *Probus* 19.4) – and as an exotic food – Elagabalus is supposed to have served six hundred ostrich heads to his guests (SHA *Elag.* 30.2) – implies that they must have been bred in Italy, but we have no independent evidence for this (Jennison 2005: 115).

13. The wild boar hunt

Inscription from a votive altar (RIB 1041), found near Stanhope, third century CE

Dedicated to Unconquered Silvanus. C. Tetius
Veturius Micianus, Pref(ect) of the Ala
Sebosianna, having captured a particularly splendid boar,
Which many had previously tried and failed to catch,
Gladly placed this altar in fulfilment of his vow.

COMMENT: Veturius Micianus' gleeful commemoration of his hunting exploit in Roman Northern England tells us several things about the role of the wild boar. His delight in his successful hunt stems not only from the impressive quality of the quarry, but also from his accomplishment where others had failed: the boar was the highest-status of prey, formidable even to the most experienced hunter, and the capture of a large and impressive specimen was a mark of masculinity. This attitude was widespread across the Mediterranean: in Macedonian culture, for instance, a man was required to kill a boar without nets, facing it single-handed with a spear before he was permitted to recline at dinner. That this was a serious rite of passage is shown by the situation of Cassander who is said to have had to sit at dinner rather than recline with his peers at the age of thirty-five (Athen. *Deip.* 18a). Trophies such as the famous boar's tusk helmets from Mycenae (Hom. *Il.* 10.261–71) and the tusks dedicated in sanctuaries (Bevan 1986: 76–7) emphasise the prestige attaching to the hunting of this animal. Among the Roman upper classes wild boar were kept in parks (*vivaria*) for sport (Pliny *NHVIII*.211), although the younger Pliny mocks what he sees as a foolishly macho pastime by recounting how he took his books on a hunting expedition and sat by the nets making notes while his slaves bagged three boar for him (*Letters* I.6).

The inscription also shows the leisure activity of a Roman soldier, though as prefect of a cavalry unit Veturius probably enjoyed greater opportunities than most, and indicates the part that hunting played in the military diet. Analysis of animal bones from military sites in Roman Britain (Davies 1971: 127–8) shows that farmed meat was regularly supplemented by hunting, with deer and boar the most common prey.

14. Royal elephant hunts

a) Egyptian inscription of Thutmose I, XVIII Dynasty, 1526–1513 BCE

The glory of king Akheperkare (Thutmose I), the blessed, he has brought these elephant tusks, from his victories [in the southern and northern countries. His majesty hunted x] elephants [in the land of Naharin, being on a] horse-drawn chariot [after his] majesty had set out in order to subdue Upper [Reten]u on [his x-th] victorious campaign.

His majesty reached the land] Ny [and found there these elephants. Never has anything similar occurred to earlier] kings. [These] elephant tusks which his majesty [brought] from this land, he gave them to the House of his father Amun, Lord of the Thrones of the Two Lands, [after] returning home in [strength, in victory] and in triumph, after overcoming his enemies.

b) Egyptian inscription of Thutmose II, XVIII Dynasty, 1493–1479 BCE

[Gifts which were brought to] the fame of the king, Ahkhepernere (Thutmose II) [from his vic]tories ////////// elephant[s] ////////// horse[s] ////////// [Retenu] the Upper ////////// [the land] of Niy ////////// kings ////////// his majesty in ////////// [when] he came out of //////////.

c) Egyptian inscription – the Napata Stele, XVIII Dynasty, reign of Thutmose III, c. 1479–1425 BCE

Another occasion now of victory that Re had commanded for me: he made me again do something very brave at the sea of Ny. He made me meet with a herd of elephants. My Majesty fought them, they being a herd of 120 animals. Never had the like been done by a king since the god who had received the white crown of Upper Egypt. I said this without boasting there, and without lie therein.

d) Egyptian tomb-biography of Amenemhab, XVIII Dynasty, reign of Thutmose III, c. 1479–1425 BCE

Again [I beheld] another excellent deed which the Lord of the Two Lands did in Niy. He hunted 120 elephants, for the sake of their tusks and [///]. I engaged the largest which was among them, which fought against His Majesty; I cut off his hand while he was alive [before] His Majesty, while I stood in the water between two rocks. Then my lord rewarded me with gold; [he] gave /// /// /// and three changes of clothing.

e) Neo-Assyrian inscription of Tiglath-Pileser I, c. 1114–1076 BCE

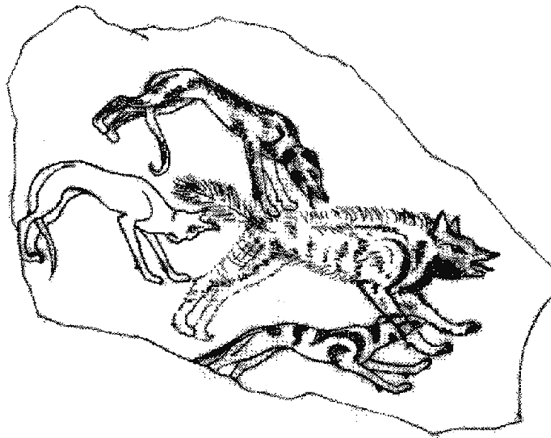
I killed ten strong bull elephants in the land Harran and the region of the River Habur (and) four live elephants I captured. I brought the hides and tusks (of the dead elephants) with the live elephants to my city Assur. By the command of the god Ninurta, who loves me, I killed on foot 120 lions with my wildly outstanding assault. In addition, 800 lions I felled from my light chariot. I have brought down every kind of wild beast and winged bird of the heavens whenever I have shot an arrow.

COMMENT: Archaeological evidence for elephant-hunting in Mesopotamia and the Levant dates back to the Early Bronze Age, although more abundant evidence for large-scale elephant hunting emerges from Late Bronze Age sites, including impressive collections of elephant bones and ivory stored as ‘trophy’ in palatial sites such as Qatna and Ugarit (Pfälzner 2013). Indeed, these finds support the idea that elephants were mainly hunted for their ivory. Thutmose III’s claim to have killed 120 elephants, should it be believed, is at least an articulation of his supremacy over Syria, as he drains its natural resources for the glory of Egypt. The courtier Amenemhab’s claim to fame, that he cut off a charging elephant’s trunk (‘I cut off his hand – *djrt* – while he was alive’), shows that elephant-hunting was not without its obvious perils.

It is clear that the hunting of elephants was a matter of great prestige. The fact that the royal hunts attested in these Egyptian and Assyrian inscriptions take place in Syria, in the tributary or conquered territories of defeated foes or dependant allies, can be read as a mark of control: the lands of Syria can be exploited for the gain of a foreign king. Successive Assyrian kings stamped their mark on Syria by hunting elephants in the area, where their elephant-hunting exploits were attempts to publicise a royal ideology of kingly might; so while Ashurnasirpal II boasted that he slaughtered thirty bull elephants and Ashur-dan II claimed to have killed fifty-six, the actual numbers may have been considerably overblown to serve royal propaganda. The royal annals note that elephants were driven into pits dug into the ground and slaughtered there (Grayson 1964).

15. Three dogs in pursuit of a hyena

Ostrakon from Deir el-Medineh, New Kingdom, Ramesside period, c. 1295–1069 BCE (Paris, Louvre E 14366)



COMMENT: Striped hyenas were commonly depicted in Egyptian hunt scenes from the earliest Dynastic period, sometimes shown being captured alive and brought back from hunts tied to poles. The only aggressive hyena in Egyptian art, however, is depicted on a tomb wall of Amenemhab (Davies 1941): otherwise hyenas are shown, as in this line drawing, more as passive victims than as aggressors – one poor creature is shown entangled helpless in a bush (Osborn and Osbornova 1998: 101–4). The gifted but unknown artist who drew this remarkable sketch had a great eye for naturalistic detail: the powerful build and distinctive hunched back of the hyena is realistically rendered, as is its terror. The hair on its back stands on end and its tongue is extended out of its mouth as it gasps for breath. The hunting dogs too are vividly depicted as they bite, twist and turn in their vicious pursuit of their prey.

16. Hunting and catching lions

a) Hebrew bible, Ezekiel 19.2–9

What a lioness was your mother
among the lions!
She lay down among them
and reared her cubs.
She brought up one of her cubs,
and he became a strong lion.
He learned to tear the prey
and he became a man-eater.
The nations heard about him,
and he was trapped in their pit.
They led him with hooks
to the land of Egypt.
When she saw her hope unfulfilled,
her expectation gone,
she took another of her cubs
and made him a strong lion.
He prowled among the lions,
for he was now a strong lion.
He learned to tear the prey
and he became a man-eater.
He broke down their strongholds
and devastated their towns.
The land and all who were in it
were terrified by his roaring.
Then the nations came against him,
those from regions round about.
They spread their net for him,
and he was trapped in their pit.
With hooks they pulled him into a cage
and brought him to the king of Babylon.
They put him in prison,
so his roar was heard no longer
on the mountains of Israel.

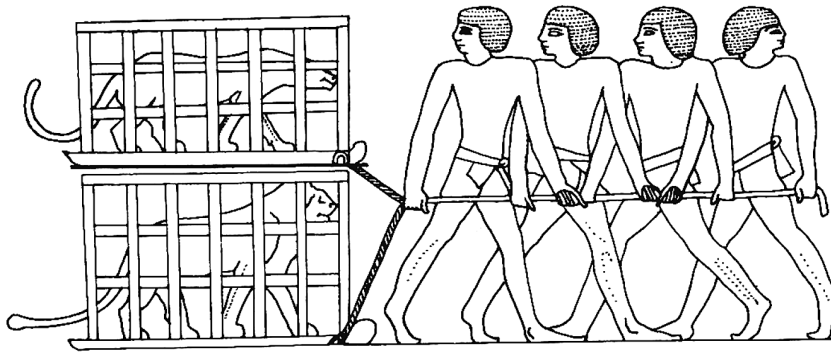
b) Old Babylonian letter from Mari, c. 1800 BCE (after Durand 1997: 349)

A lion has devoured ḥabudu-Ami's sheep in the fold. Now he has dug a pit in his fold at Bit-Akkaka. While searching for the fold the lion fell into the pit, when ḥabudu-Ami was in Dur-Yahdun-Lim. The lion tried to escape [the pit], but the shepherds gathered wood, which they filled into the pit and set it on fire. Thus they burned the lion in the fire.

c) Akkadian cuneiform inscription of Ashurbanipal (Luckenbill 1989: 363)

Since I took my seat upon the throne of my father that begot me, Adad has sent his rains, Ea has opened up his fountains, the forests have been thriving exceedingly, the reeds in the marshes have shot up so high there is no getting through them. The young of the lions grew up therein, in countless numbers . . . They became fierce and terrible through devouring of herds, flocks, and people. With their roaring the hills resound, the beasts of the plain are terrified. They keep bringing down the cattle of the plain, they keep shedding the blood of men. As if the plague had been loose, there were heaped up the corpses of dead men, cattle, and [sheep]. The shepherds and herdsmen weep . . . The villages are in mourning day and night. The deeds of these lions they told me. In the course of my campaign into . . . their lairs I broke up. . .

**d) Mastaba of Ptahhotep at Saqqara; V Dynasty
(after Janssen and Jansen 1989: 57)**



COMMENT: Lions were an everyday problem in the ancient Near East: they are regularly attested stealing from or destroying domestic flocks and even attacking, killing and devouring humans. A Phoenician ivory plaque found at Nimrud (c. 900–700 BCE) actually shows a man-eater: a lioness is depicted mauling an African (Mallowan 1966 (i): 139–44, figs 81–2, 84). She is shown standing over her victim who has his knees drawn up and is lying back supported by his hands on the ground behind him as she bites at his throat and kills him, in the same manner that lionesses kill antelope, gazelle and zebra.

When lions came too close to human settlements the inhabitants would try to catch and kill them, either through hunting or ritual slaughter (see below) or by less orthodox methods, as described in the Old Babylonian text above. The most common method of lion capture was that of a pit dug into the earth (Akkadian *šubtu*; Grayson 1964). In fact, this was a standard practice in the hunting of animals and Near Eastern and Egyptian texts often talk of animal pits, although they are never represented in art. Ashurnasirpal II, for instance, records ‘throwing’ (i.e. driving) wild asses and even elephants into pits.

An interesting text from a minor ruler, Anitta of Kuššar, records that lions were among animals pursued during a royal chase:

[I went on] a hun[t]. On the first day (I captured): two lions, seventy boars, one boar of the canebrake, and 120 (other) wild animals, whether leopards, lions, mountain sheep, wild sheep, or [. . .], and I brought this to my city Nes’a.

It has been suggested, however, that the text is not a tally of dead animals ‘bagged’ in a hunt, but rather a list of animals captured alive to stock a royal zoo or game reserve, a practice known to have been followed by the Hittites. One Hittite letter to the king (Collins 2003: 78) notes that:

Your Majesty, my lord, have instructed me, Ha-biri, as follows: ‘On this trip take birds captive.’ They willingly collected birds for us, (but) a lion, a leopard, a *šarmiya*-animal and a red-deer have not been captured for us.

The Hebrew text of Ezekiel (a, above) uses the word *sūgar* for the cage in which a captured lion might be kept, like those depicted in the Egyptian tomb of Ptahhotep holding a lion and a leopard; the cages are being drawn along on sledges, probably heading to a royal menagerie or a hunting ground. An alternative meaning of *sūgar* is ‘neck-stock’ or ‘wooden collar’ (Akkadian *šigaru*), and both cages and stocks were used by the Assyrians to transport and display wild animals and human criminals and in several Akkadian texts there are examples of both being chained together, such as the comment in the annals of Ashurbanipal: ‘To demonstrate that Ashur and the great gods, my lords (are worthy of) the (highest) praise, I imposed (the following) heavy punishment: I put a pillory on his neck together with a bear and a dog, and made him stand on guard (duty) at the gate of Nineveh’ (see comments by Brownlee 1986).

17. Capturing a lion for the king to hunt

Old Babylonian letter from Mari, c. 1800 BCE (after Watanabe 2002: 85)

Speak to my lord, thus (says) Yaqqim-Addu, your servant.

A lioness was captured during the night in a barn (at) Bit-Akkaka. The next morning I was told the news and I left. In order that no one killed the lion, I stayed all day at Bit-Akkaka, saying to myself, ‘I must get it (the lioness) alive to my lord’. I threw (it) a [dog] and a pig; it killed them, left them, and did not want to eat them at all. I sent a message to Bidakha that a cage should be brought. (But) the day after, before the cage reached me, the lion died. I examined this lioness; she was old and ill. My lord may say, ‘Someone must have killed that lion’. If anyone has touched this lion, (I should be treated) as if (I had broken) the taboo of my lord. Now because this lion is dead, I had its skin flayed and gave its flesh to be eaten. The lion was old, and it is (because) of (its) weakness that it died’.

COMMENT: A series of fascinating letters sent by Yaqqim-Addu, a regional governor, to the king of Mari reports how a lioness was captured in the region of Bit-Akkaka and how for five days Yaqqim-Addu tried to keep it alive and healthy so that it could be delivered to the monarch who might then take his royal pleasure in its slaughter. This, the last of Yaqqim-Addu’s letters, tells a sorry tale of administrative bungling. Yaqqim-Addu’s discomfort at reporting the death of the lioness is palpable and at the root of his anxiety is the worry of being found guilty of having broken ‘the taboo of my lord’ (i.e. being accused of killing the animal himself). In the Near East it was the king’s prerogative to kill a lion: ‘To finish the lion with the weapon was my own privilege’ affirms one Old Babylonian ruler (*Šulgi Hymn B*; Watanabe 2002: 83).

This royal entitlement was still in operation in Achaemenid Iran, and Ctesias’ account of the nobleman Megabyzus’ fall from royal favour illustrates the intricacies of this court custom (F14 §39–43; Llewellyn-Jones and Robson 2010: 190):

The King went out hunting and was attacked by a lion. Megabyzus struck the beast with a javelin as it was flying through the air and killed it. And Artaxerxes [I] was annoyed because Megabyzus had struck it before he could hit it himself. And he ordered that Megabyzus should be beheaded.

By spearing a lion, Megabyzus not only defied the courtly protocol which gave the king alone the right to kill a lion, but seemed to question Artaxerxes' ability as a hunter and by extension his fitness to rule (the same theme reappears in a story of one of Alexander of Macedon's hunts: Curtius Rufus VIII.1.14–16; Llewellyn-Jones 2013: 198). It appears that in a later court edict Artaxerxes I revised the protocol of the lion hunt: '[Artaxerxes] was the first to pass a command saying that his hunting companions might, if they were able, cast their spears without waiting for him to throw first' (Plut. *Mor.* 173d). Nonetheless, as Briant (2002: 231) points out, 'during royal hunts . . . courtiers had to be circumspect. While someone who came to the aid of the king could be richly rewarded . . . the example of Megabyzus indicates that it was not a good idea to appear to be a rival'.

One further interesting detail arises from Yaqqim-Addu's letter to his king: the dead lioness, it is revealed, was skinned and eaten. Who exactly consumed the meat is unclear, but it is not impossible to think that it was shared out amongst Yaqqim-Addu's household staff; we need not think that eating lion-flesh was taboo in Near Eastern society.

18. A tiger hunt

*Line drawing of a Sassanian silver-gilt plate
(Japan, private collection) (after Tanabe 1998: 94)*



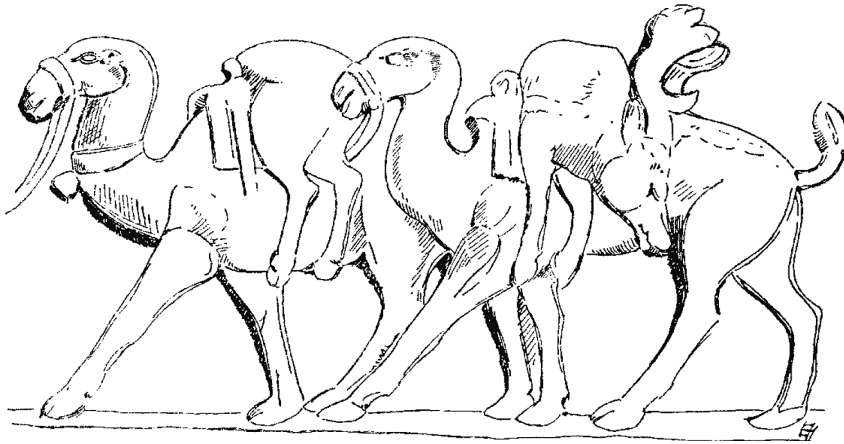
COMMENT: Images of ancient tiger-hunts are rare. This is probably explained by the relative scarcity of tigers beyond India, Central Asia and Siberia even in antiquity. It is thought that this silver dish was created in Kushano-Sassanian territory which included parts of modern Turkmenistan, Afghanistan and northern Pakistan where tigers could be found and hunted. Although the scene is based on the style created by Iranian artists to show more familiar lion hunts (Tanabe 1998: 97, fig. 3), the tigers are nevertheless accurately, if stylistically, represented.

It is possible that big-cat hunting from horseback represented some kind of equestrian investiture for Sassanian shahs and that, therefore, the tiger hunt depicted here encoded a message of the monarch's dominance over the eastern part of his empire. Moreover, the slaughter of tigers was perhaps thought to have empowering qualities. As Hughes (2013: 47) argues,

Any contact with these impressive creatures . . . was held to have a . . . positive impact on rulers who could thereby claim to have assimilated the animals' vitality into their own bodies . . . Tigers were superior to other animals, just as kings were superior to other men.

19. Bringing home the game

*Line drawing taken from a Sasanian relief at
Taq-e Bostan, Iran, c. 591–628 CE*



COMMENT: A somewhat disconcerting element of the hunt is the use made by humans of other animals in the capture and killing of prey. Dogs, felines, such as cheetah, and birds of prey were all used in the process of the capture or killing of game (see WORKING ANIMALS nos 15 and 16), while horses provided the main means of transportation, either pulling chariots or as individual mounts. And of course a successful hunting expedition required further animal participation to transport the slaughtered carcasses of the victims. Hunting scenes carved into an *ivan* (arched grotto) at Taq-e Bostan in northern Iran show the full process of a royal boar hunt in which elephants are employed to flush out the boars and carry the carcasses (Herzfeld 1941: 336–7). Stags are also part of the royal game, depicted in flying gallop trying to escape the arrows of the king and his courtiers, and the grotto walls show the king's servants busying themselves with the slaughtered deer, using trains of camels to carry the stags through the forest and back to the royal camp.

Royal hunting scenes are common in Sasanian art, especially in gold and silver work where the Shah is represented hunting from horseback or even mounted on a camel (as on the silver dish New York Metropolitan Museum no. 1944.402). Hunting scenes were created to stress the monarch's role as hero – a longstanding Persian tradition – linking him with the god Mithras (Harper 1978: 34). Representations of the stag in Iranian and Central Asian art (mainly in metal work and in textiles) have a deep antiquity (Kozloff et al. 1986: 14–15) and it is logical to see this relief as a final tribute to the animal's role in the life of ancient Iranian peoples.

Bibliography

- P. Albenda, 'Royal hunts: antlered and horned animals from distant lands', *Bulletin of the American Schools of Oriental Research* 349 (2008), 61–78.
- T. Allsen, *The Royal Hunt in Eurasian History* (Pennsylvania 2006).
- J.K. Anderson, *Hunting in the Ancient World* (Berkeley 1985).
- P. Anus, 'Une domaine thébain d'époque "amarnienne". Sur quelques blocs de remploi trouvés à Karnak', *Bulletin de l'Institut français d'archéologie orientale* 69 (1971), 69–88.
- C. Bates, *Masculinity and the Hunt. Wyatt to Spenser* (Oxford 2013).
- E. Bevan, *Representations of Animals in Sanctuaries of Artemis and Other Olympian Deities* (Oxford 1986).
- K. Bradley, 'The sentimental education of the Roman child: the role of pet-keeping', *Latomus* 57 (1998), 523–57.
- D. Brewer, T. Clark & A. Phillips, *Dogs in Antiquity – Anubis to Cerberus. The Origins of the Domestic Dog* (Oxford 2001).
- P. Briant, *From Cyrus to Alexander. A History of the Persian Empire* (Winona Lake 2002).
- E. Brooke-Hitching, *Fox Tossing, Octopus Wrestling and Other Forgotten Sports* (London 2015).
- W.H. Brownlee, *Ezekiel 1–19* (Waco 1986).
- M. Cartmill, 'Hunting and humanity in Western thought', *Social Research* 62.3 (1995), 773–86.
- B.-J. Collins, 'On the trail of the deer: Hittite *kurala*-' in G. Beckman, R. Beale and G. McMahon (eds), *Hittite Studies in Honor of Harry A. Hoffner, Jr on the Occasion of His 65th Birthday* (Winona Lake 2003), 73–82.
- N.L. Corkill, 'Snake specialists in Iraq', *Iraq* 6 (1939), 45–52.
- E. Csapo, 'Deep ambivalence: notes on a Greek cockfight (Part I)', *Phoenix* 47 (1993), 1–28.
- E. Csapo, 'The cultural poetics of the Greek cockfight', *AAIA Bulletin* 4 (2006/7), 20–37.
- N.M. Davies, 'Amenemḥab encountering a hyena: from the Tomb of Amenemḥab at Thebes (no. 85)', *JEA* 26 (1941), 82.
- R.W. Davies, 'The Roman military diet', *Britannia* 2 (1971), 122–42.
- K.M. Dunbabin, *The Mosaics of Roman North Africa* (Oxford 1978).
- J.-M. Durand, *Documents épistolaires du palais du Mari* 1 (Paris 1997).
- B.R. Foster, *Before the Muses. An Anthology of Akkadian Literature* (Bethesda 2005).
- P.O. Harper, *The Royal Hunter. Art of the Sasanian Empire* (New York 1978).
- E. Herzfeld, *Iran in the Ancient East* (Oxford 1941).
- A. Höfele, *Stage, Stake and Scaffold. Humans and Animals in Shakespeare's Theatre* (Oxford 2011).
- J.M. Galán, 'Bullfight scenes in ancient Egyptian tombs', *Journal of Egyptian Archaeology* 80 (1994), 81–96.
- A.K. Grayson, 'Ambush and animal pit in Akkadian', in R.D. Briggs and J.A. Bickerman (eds), *Studies Presented to A.L. Oppenheim* (Chicago 1964), 90–4.
- M. Horman, *The Complete History of Fighting Dogs* (New York 1999).
- P.F. Houlihan, *The Birds of Ancient Egypt* (Warminster 1986).
- P.F. Houlihan, *The Animal World of the Pharaohs* (London 1996).
- J.E. Hughes, *Animal Kingdoms. Hunting, the Environment, and Power in the Indian Princely States* (Cambridge 2013).
- R. Janssen and J. Janssen, *Egyptian Household Animals* (Aylesbury 1989).
- G. Jennison, *Animals for Show and Pleasure in Ancient Rome* (Manchester 1937, repr. Philadelphia 2005).
- P. Jones, 'Animal husbandry', in A. McFarlane and A.-L. Mourad (eds), *Behind the Scenes. Daily Life in Old Kingdom Egypt* (Oxford 2012), 97–107.
- O. Keel, *The Symbolism of the Biblical World. Ancient Near Eastern Iconography and the Book of Psalms* (New York 1978).
- C. Kondoleon, 'Signs of privilege and pleasure: Roman domestic mosaics', in E.K. Gazda and A.E. Haackl (eds), *Roman Art in the Private Sphere: new perspectives in the architecture and décor of the domus, villa and insula* (Ann Arbor 1991), 105–15.
- A.P. Kozloff, D.G. Mitten and M. Sguaitamatti, *More Animals in Ancient Art from the Leo Mildenberg Collection* (Mainz am Rhein 1986).
- D.G. Kyle, *Spectacles of Death in Ancient Rome* (1998).
- R. Lane Fox, 'Ancient hunting from Homer to Polybius', in G. Shipley and J.B. Salmon (eds), *Human Landscapes in Classical Antiquity* (1996), 119–53.
- M. Lichtheim, *Ancient Egyptian Literature. Volume II: The New Kingdom* (Berkeley 1976).
- T.C. Lindstrom, 'The animals of the arena: how and why could their destruction and death be endured and enjoyed?' *World Archaeology* 42.2 (2010), 310–23.
- L. Llewellyn-Jones, *King and Court in Ancient Persia 559–331 BCE* (Edinburgh 2013).

- L. Llewellyn-Jones, 'Keeping and displaying royal tribute animals in ancient Persia and the Near East', in T. Foegen and E.V. Thomas (eds), *Interactions between Humans and Animals in Graeco-Roman Antiquity* (Berlin 2017).
- L. Llewellyn-Jones and J. Robson, *Ctesias' History of Persia. Tales of the Orient* (London 2010).
- D.D. Luckenbill, *Ancient Records of Assyria and Babylonia* (2 vols) (Chicago 1989).
- M. MacKinnon, 'Supplying exotic animals for the Roman amphitheatre games: new reconstructions combining archaeological, ancient textual, historical and ethnographic data', *Mouseion* 6.2 (2006), 137–61.
- M.E.L. Mallowan, *Nimrud and its Remains* (2 vols) (London, 1966).
- D.J. Osborn and J. Osbornova, *The Mammals of Ancient Egypt* (Warminster 1998).
- P. Pfälzner, 'The elephant hunts of Bronze-Age Syria', in J. Aruz, S.B. Graff and Y. Rakic (eds), *Cultures in Contact. From Mesopotamia to the Mediterranean in the Second Millennium BC* (New York 2013), 112–31.
- B. Pongratz-Leisten, *Religion and Ideology in Assyria* (Göttingen 2015).
- J.E. Reade, 'The Rassam Obelisk', *Iraq* 42.1 (1980), 1–22.
- D. Serjeantson, *Birds* (Cambridge 2009).
- K. Tanabe, 'A newly located Kushano-Sasanian silver plate. The origin of the royal hunt on horseback for two male lions on "Sasanian" silver plates', in V.S. Curtis, R. Hillenbrand and J.M. Rogers (eds), *The Art and Archaeology of Ancient Persia. New Light on the Parthian and Sasanian Empires* (London and New York 1998), 93–102.
- J.M.C. Toynbee, 'Graeco-Roman neck-wear for animals', *Latomus* 35 (1976), 269–75.
- J.M.C. Toynbee, *Animals in Roman Life and Art* (ed.², Barnsley 2013).
- C.E. Watanabe, *Animal Symbolism in Mesopotamia. A Contextual Approach* (Vienna 2002).
- N. Wyatt, *Religious Texts from Ugarit* (London 1998).
- J.G. Younger, 'Bronze-age representations of Aegean bull-games', in R. Laffineur and W.-D. Niemeier (eds), *POLITEIA. Society and State in the Aegean Bronze Age* (Liège and Austin, TX 1995) 507–45.

INDEX ANIMALIUM

- addax 300, 301, 308, 749
 ant 11, 17, 593–600, 613, 728
 antelope 18, 158, 219, 296–310, 315, 426, 429, 441, 450, 452, 715, 739, 748, 752, 757
 ape *see* monkey
 aurochs 10, 32, 321, 328, 422–4, 585

 baboon 202, 273, 452, 462–9, 696, 697, 724
 badger 9, 208, 368–70, 377
 bat 18–20, 22, 402–7, 491, 543
 bear 6, 10, 48, 164, 177, 220, 221, 228, 256, 307, 316–22, 325, 335, 336, 342, 407, 409, 428, 449, 702, 704, 705, 722, 727, 738, 740, 745, 758
 bed bug 640
 bee 3, 22, 23, 281–95, 594, 634
 bison 10, 422, 424, 449
 bittern 530, 532
 buffalo 439, 449
 butterfly 633, 634
 buzzard 13, 499, 501, 502

 camel 9, 18, 37, 38, 127, 150, 155, 158, 168–79, 331, 424, 429, 450, 453, 466, 453, 599, 687, 701, 702, 760
 caracal 9
 carp 20, 23, 25, 558, 652, 659, 660, 664, 669
 cat 2, 5, 8, 9, 17, 155, 199–210, 363, 371, 386–8, 394, 395, 398, 427, 463, 493, 513, 531, 713, 718–22; kitten 202, 203, 208, 513
 cattle 6, 9, 25, 28, 32–56, 71, 83, 84, 107, 109, 128, 154, 157, 171, 202, 216–19, 232, 257, 259, 231, 422, 423, 439, 458, 457, 549, 606, 633, 636, 653, 663, 687, 697, 688, 740, 757; bull 8–10, 13, 20, 23–5, 33–6, 41, 42, 44–9, 54, 66, 104, 117, 218, 223, 282, 321, 331, 336, 342, 351, 359, 419, 422, 423, 430, 437, 448, 449, 546, 510, 541, 590, 615, 655, 671, 687, 705, 740, 741, 744–6; calf 20, 24, 33, 36, 37, 40, 42–4, 50–4, 133, 354, 416, 417, 423, 432, 549, 558, 559, 663, 687, 740; cow 9, 12, 20, 22–4, 32–7, 40–52, 54, 72, 74, 91, 103, 117, 133, 177, 190, 220, 222, 308, 330, 367, 422, 428, 481, 535, 558, 559, 633, 688, 690, 694, 745; heifer 33, 218, 288, 633, 690; ox 9, 18, 22, 24, 32–56, 86, 115, 116, 131, 132, 136, 145, 146, 154, 155, 177, 189, 216, 220, 221, 222, 225, 232, 243, 282, 293, 294, 307, 326, 331, 337, 354, 361, 421, 425, 428, 429, 432, 438, 439, 441, 585, 586, 587, 657, 686, 687, 688, 689, 690, 691, 697, 698, 740, 748
 centipede 11, 581
 chameleon 10, 573, 574, 578
 chicken 230, 243–54, 278, 619, 709; cockerel 14–16, 51, 244, 245, 247–9, 253, 361, 421, 457, 596, 620, 628, 709, 742, 743; hen 247, 249, 250
 cheetah 9, 171, 202, 340, 455–9, 537, 687, 707, 709, 760
 chimpanzee 462, 471
 cicada 302, 303, 598, 600–5, 626, 635, 735, 736
 cobra 353, 358, 385, 388, 389, 442, 513, 578, 584, 586, 587, 471, 472
 cormorant 18, 19
 crab 10, 21, 22, 57, 523, 614, 619, 620, 679–83
 crane 13, 268, 507, 519–24, 730
 crayfish 21, 242, 676, 679
 cricket 10, 19, 92, 536, 600–5, 703, 717, 735
 crocodile 22, 23, 155, 169, 308, 388, 545–56, 518, 657, 663
 crow 269, 305, 469, 473–88, 564, 732
 cuttlefish 22, 667, 675, 677

 deer 1, 10, 18, 21, 22, 24, 25, 47, 66, 180, 190, 192, 193, 296–309, 315, 343, 347, 366, 397, 424, 426, 446, 450–2, 458, 459, 510, 688, 694, 745, 748–50, 753, 758, 760; doe 304, 305; fawn 300, 304–7, 313, 314, 508, 509, 727, 749; stag 10, 65, 142, 219, 250, 280, 297, 299, 301–8, 313, 347, 354, 357, 425, 510, 694, 760
 dog 2–4, 8, 9, 12, 21, 22, 34, 48, 51, 62, 66, 68, 74, 100–3, 106, 141, 146, 149, 154, 155, 163, 179–98, 289, 304, 307, 310, 312, 315, 319, 330, 331, 344, 345, 348, 350–6, 364, 366, 367, 369, 373, 375–7, 385, 386, 404, 414, 452, 456–9, 462, 474, 477, 504, 516, 549, 599, 633, 638, 639, 657, 666, 667, 673, 678, 684, 687, 693–5, 713–18, 720, 721, 726, 730, 734, 746, 748, 750–2, 758; bitch 9, 185, 187, 195, 355, 694, 695, 717, 718;

- puppy 103, 184, 185, 191, 195, 227, 315, 558, 717, 725, 746
- dogfish 21, 664, 667, 673–675
- dolphin 21, 281, 289, 320, 409–17, 419–21, 543, 665, 672, 675
- donkey 6, 8, 12, 28, 37–9, 44, 56, 59, 77, 79, 105, 107, 117, 118, 134, 147–68, 171, 220, 222, 284, 285, 427, 429, 548, 588, 688, 690–3, 698–701, 714, 722, 727, 746; colt/foal 150–5, 165, 171, 623; hinny 21, 165, 166; jack/jackass 165; jenny/jennet 116, 149, 155, 157, 158
- dormouse 10, 20, 393
- dove 14, 15, 254–63, 271, 477, 485, 500, 501, 677, 703, 729, 730
- dragonfly 11
- duck 13, 15, 16, 201–3, 207, 230, 239–43, 245, 247, 349, 442, 503, 509, 520, 524, 526, 635, 679, 720, 730, 731, 733
- eagle 16, 13, 18, 19, 22, 130, 131, 143, 156, 187, 235, 242, 281, 286, 293, 377, 403, 413, 482, 501–11, 517, 528, 585, 586, 619, 622, 654, 732
- eel 9, 20, 651, 659, 663, 664, 665, 669, 671, 678
- egret 13, 530, 532, 543
- elephant 4, 6, 9, 22, 23, 142, 164, 174, 280, 281, 284, 321, 332, 414, 423, 425–35, 439, 441, 444, 447–9, 458–63, 466, 471, 513, 538, 578, 590, 628, 631, 652, 686, 687, 702, 705, 706, 709–11, 733, 745, 754, 755, 760
- elk 321, 423–6
- falcon 15, 18, 133, 270, 298, 498–502, 507, 513, 707–9, 711
- ferret 201, 202, 378
- fish 3, 4, 8, 13–18, 20–5, 101, 105, 111, 215–20, 232, 239, 241, 242, 258, 259, 293, 316, 367, 384, 405, 407, 410, 415–19, 458, 509, 512, 530, 531, 534, 545, 546, 549, 556–60, 566, 599, 610, 630, 651–84, 714, 719
- flamingo 279, 315
- flea 11, 638–40
- fly 11, 628–33
- fox 2, 5, 9, 88, 186, 199, 208, 300, 345, 350, 355, 356, 362–8, 375, 377, 398, 402, 427, 493, 517, 599, 725, 726, 739, 749
- frog 11, 17, 18, 66, 239, 356, 380, 393, 395, 439, 564–72, 620, 626, 630, 645, 671
- gadfly 633, 634
- gazelle 10, 18, 40, 47, 65, 158, 171, 213, 214, 225, 247, 299, 300–2, 309–16, 351, 451, 493, 537, 583, 525, 715, 726, 727, 748, 757
- gecko 11, 17, 19, 30, 573–5, 620, 678
- genet 200, 385
- gerbil 10, 390, 393
- giraffe 8, 302, 434, 447, 450–6, 463, 749
- gnat 11, 17, 570, 628, 639
- goat 18, 22, 24, 36, 37, 44, 48, 50, 56–74, 77, 78, 81, 92, 98, 100, 105, 147, 151, 214, 219, 236, 307, 315, 324, 341, 354, 356, 365, 377, 460, 510, 569, 688
- goose 12, 14, 15, 22, 230–40, 246, 367, 524, 526, 526, 543, 552, 719, 725, 730, 731, 740, 741
- gorilla 462, 471
- goshawk 499, 501, 709
- grasshopper 10, 19, 381, 27, 601, 604, 605, 611
- guinea-fowl 91, 249, 279, 474, 538
- gull 18, 19
- hamster 391, 393, 394
- hare 10, 20, 180, 190–2, 200, 207, 289, 366, 367, 372–80, 493, 502, 507–10, 564, 604, 610, 619, 713, 717, 723, 728
- harrier hawk 499
- hartebeest 300, 308
- hawk 18, 256, 267, 263, 498–502, 506, 534, 708
- hedgehog 2, 21, 362, 367, 380–85, 398
- heron 14, 15, 18, 19, 30, 507, 530–2, 558–60, 656
- hippopotamus 22, 105, 169, 240, 308, 380, 404, 426, 435–44, 448, 454, 478, 542, 551, 552, 554, 565, 578, 587, 629, 635
- hoopoe 14, 18, 19, 534–7
- horse 4–6, 8, 21, 22, 34, 38, 50, 53, 80, 82, 83, 91, 105, 115–48, 151, 153–5, 160–6, 171, 177, 178, 186, 188, 193, 210, 216, 219–27, 232, 243, 278, 357, 360, 376, 377, 406, 414, 428, 429, 439, 441, 446, 455, 459, 460, 489, 502, 538, 539, 543, 455, 565, 589, 595, 607, 611, 619, 623, 627, 634, 687, 688, 693, 701, 711, 713, 714, 721, 722, 744, 749–51, 754, 760; foal 116, 119, 127, 129, 135, 136, 151, 165, 166; mare 91, 118, 120, 121, 126–9, 131, 133–6, 140, 150, 165, 166, 461, 688, 701, 742
- horsefly 11
- human 1–6, 20, 22, 23, 28–32, 35–7, 40, 45, 47, 54, 56, 59, 61, 62, 69, 72–4, 83, 87, 92, 100, 101, 106, 108, 111, 115, 139, 148–51, 154, 155, 163, 170, 178, 179, 187–90, 194, 196, 197, 200, 203, 205, 208, 210–29, 235, 241, 242, 244, 247, 249, 254, 259, 263, 265–70, 281, 285, 293, 296, 303, 307, 313, 316, 318, 322, 330, 333, 337, 339, 344, 348, 349, 350, 353, 357, 361, 362, 365, 367, 370, 376, 377, 380, 385, 387, 393, 394, 404, 415, 416, 420, 423, 426, 427, 438, 459, 460, 463, 467–9, 473, 474, 476, 478, 485, 490–3, 499, 504, 512, 516, 523, 536, 545, 548, 560, 566, 569, 572, 574, 576, 579, 581, 584, 587, 593–6, 616, 621, 625, 628, 631, 632, 635, 638–40, 643, 644, 646, 659, 660, 669, 647, 686, 687, 693, 694, 705, 706, 713–16, 723–7, 731, 738, 740, 741, 746, 757, 758
- hyena 9, 182, 184, 345, 346, 348–52, 355, 477, 507, 520, 534, 697, 755
- hyrax 18, 28, 372, 594

- ibex 18, 24, 57, 64, 65, 158, 214, 219, 300, 301, 462, 727, 748
- ibis 442, 443, 454, 465, 530, 531, 554
- jackal 149, 184, 185, 228, 300, 344–8, 352, 353, 365, 374, 458, 477, 517, 539, 558, 749
- jackdaw 473, 479, 480, 612, 731
- jellyfish 11
- jerboa 381, 390, 394, 398
- kestrel 499
- kite 18, 19, 480, 499–503, 509, 568
- leopard 2, 8–10, 99, 131, 207, 322, 336, 338–44, 354, 448, 450, 453, 455–7, 461, 510, 620, 702, 722, 738, 745, 757, 758
- lion 3, 4, 6, 8, 9, 21, 22, 24, 27, 34, 36, 38, 65–7, 75, 78, 86, 99, 101, 116, 117, 120, 143, 149, 155, 169, 173, 183, 184, 188, 207, 210, 211, 214, 216, 219–21, 225, 228, 249, 278, 287, 288, 304, 312, 315, 318, 319, 321–38, 347, 348, 350, 354–8, 397, 426, 459–62, 474, 478, 485, 492, 505, 510, 541, 549, 607, 615, 619, 620, 629, 647, 702, 722, 723, 733, 738, 740, 745, 746, 754, 756, 757–9, 762; lioness 9, 315, 322, 324, 326, 332, 334–6, 350, 461, 607, 740, 756, 756, 758, 759
- lizard 10, 11, 19, 22, 30, 302, 390, 405, 460, 491, 519, 546, 552, 554, 558, 573–8, 582, 587, 594, 619, 624, 626, 678
- lobster 20–2, 679, 680
- locust 1, 10, 17, 19, 129, 210, 288, 303, 381, 407, 479, 537, 594, 596, 600, 604–14, 633, 674
- louse 2, 11, 278, 640–3
- lynx 10, 749
- macaque 462, 470
- mackerel 667
- magpie 13, 269, 478, 493, 725, 726, 731
- marmot 198
- marten 198, 369
- mole 2, 17, 18, 22, 201, 370–2, 403
- mongoose 10, 200, 202, 207, 367, 385–9, 394, 442, 578, 725, 726
- monkey (ape) 5, 8, 10, 181, 429, 451, 452, 456, 458, 462–72, 546, 696, 703, 714, 719
- mosquito 11, 427, 628
- moth 11, 634, 637, 638
- mouse 3, 8, 17, 18, 198, 207, 221, 224, 329, 330, 386, 387, 391, 393–402, 582, 619, 624, 721
- mule 21, 101, 115, 117, 125, 127, 134, 145, 147–50, 152, 154, 161–7, 178, 214, 216, 221, 222, 233, 243, 307, 481, 596, 687, 688, 692, 700, 701
- murex 22, 647, 666, 683–6
- mussel 666, 683, 684
- nightingale 489–91, 499, 731, 735
- nilgai 307, 308, 452, 453
- octopus 5, 22, 636, 664, 666, 675–9
- okapi 447, 452, 453
- onager 37, 101, 117, 148, 151
- oryx 300, 301, 308, 748, 749
- osprey 18, 19
- ostrich 13, 23, 120, 214, 432, 441, 456, 537–44, 751–3
- otter 10, 22, 368, 385
- owl 51, 265, 267, 346, 403, 491–9, 507, 532, 563, 602, 632
- oyster 145, 681–3
- parrot 268–71, 447, 460, 478, 604, 687, 731, 732
- parrot-wrasse 667, 668
- partridge 14, 15, 30, 264, 377, 525, 536, 639, 721, 730, 731
- peacock 13, 23, 247, 264, 272–7, 279, 280, 461, 538, 709
- pelican 532–4
- peregrine falcon 498–501
- pheasant 264, 278–81, 731
- pig 2, 3, 8, 10, 18, 20, 22, 49, 71, 95, 108–15, 146, 186, 208, 221, 222, 354, 383, 390, 391, 398, 405, 432, 435, 458, 469, 552, 564, 758; piglet 10, 36, 67, 99, 102–6, 109–14, 184, 673, 674; sow 10, 99, 100, 103, 105–7, 112, 658
- pigeon 14, 42, 131, 251, 254, 253, 256–8, 260–2, 501, 507, 703, 729
- polar bear 317
- polecat 198, 201
- porcupine 10, 21, 25, 320, 381, 626
- prawn 22, 666, 667
- praying mantis 11
- python 448, 578
- quail 264, 268, 274, 295, 582, 731
- rabbit 2, 18, 201, 363, 372, 373, 378–80, 714
- rat 19, 387, 389–95, 398
- raven 15, 18, 19, 255, 256, 269, 305, 473–88, 708, 709, 731, 732
- rhinoceros 439, 444–50, 578
- salamander 17, 22, 573
- scarab beetle 498, 522, 621–4
- scorpion 11, 17, 24, 25, 219, 354, 381, 459, 558, 583, 614–21, 632
- sea urchin 22
- seal 21, 22, 69, 351, 407–10, 421, 543, 675
- shark 109, 673–5
- sheep 9, 10, 18, 20–3, 25, 33, 37, 38, 45–9, 56–9, 63, 66, 67, 70–98, 100, 103, 104, 109, 131, 145, 154, 171, 177, 189, 202, 208, 221, 222, 255, 257, 301, 312, 318, 326, 331, 351, 352, 354–6, 364, 408, 462, 470, 503, 585, 628, 653, 657, 687, 688, 714, 756, 757; ewe 57, 76–80, 82–5, 86, 88–92, 94, 97; lamb 25, 43, 45, 58, 59, 67, 75–81, 86,

Index animalium

- 88–97, 153, 171, 257, 314, 326, 354, 493, 503,
677, 687; ram 10, 25, 57, 60, 61, 74, 75, 79–82,
84, 85, 89, 90, 93, 94, 97
shrew 10, 371, 388, 390, 397, 371
shrimp 20
slug 647
snail 302, 303, 469, 647–50, 683
snake 3, 9, 16, 17, 21, 22, 26, 41, 53, 82, 136, 155,
196, 200, 202, 250, 256, 275, 294, 318, 355, 381,
385–9, 404, 448, 485, 503, 504, 507, 519, 523,
548, 558, 559, 578–92, 602, 614, 618, 619, 626,
627, 664, 668, 725, 726, 733, 734, 741, 742
sparrow 256, 483–8, 507, 508, 543, 604, 732
spider 11, 17, 293, 490, 587, 614, 619, 624–8, 631,
636
spoonbill 530, 532
stork 13–15, 18, 28, 256, 507, 519, 523, 524, 538,
703, 730
swallow 14, 15, 265, 289, 294, 364, 414, 477,
484–6, 490, 495, 521, 534–6, 631
swan 14, 22, 29, 320, 482, 524–9, 533, 542

termite 11
tiger 9, 350, 448, 458–62, 538, 746, 759, 760
tilapia 652, 661
toad 11, 18, 501, 519, 558, 565–72, 619, 645
tortoise 10, 22, 25, 302, 460, 518, 556–64, 620, 734,
735

trout 267, 268
tuna 652, 670, 671
turbot 659, 667
turtle 3, 8, 9, 556–64, 656, 703

vole 10, 390
vulture 14, 15, 18, 19, 187, 234, 307, 476, 480, 499,
502, 509, 512–19

water boatman 11
water buffalo 429, 462
wasp 11, 22, 66, 108, 292, 593, 624, 627
weasel 17, 19, 198–202, 207, 242, 363, 368, 371,
385, 390, 406, 749
weevil 1, 6, 11, 18, 644–6
whale 22, 23, 408, 410, 413, 417–22, 435, 543,
672
whelk 22, 685
wild ass 101, 148, 184, 214, 434, 446, 474, 747,
757
wild boar 10, 99, 100, 107, 304, 377, 448, 745, 753
wild dog 348
woodcock 279
worm 11, 18, 109, 224, 239, 293, 368, 395, 619,
630

zebra 757
zebu 10, 32

INDEX OF CLASSICAL AUTHORS

References are to main entries

- Aelian [21](#), [54](#), [178](#), [260](#), [276](#), [292](#), [304](#), [350](#), [367](#),
[388](#), [399](#), [421](#), [446](#), [459](#), [479](#), [517](#), [536](#), [572](#), [620](#),
[637](#), [669](#), [705](#), [733](#), [742](#)
- Aesop [162](#), [200](#), [406](#), [598](#), [603](#), [691](#)
- Agatharchides of Cnidos [278](#)
- Ammianus Marcellinus [727](#)
- Apollonius Rhodius [289](#)
- Apuleius [163](#), [692](#)
- Aristophanes [200](#), [278](#), [486](#), [487](#), [569](#), [575](#), [623](#), [639](#)
- Aristophanes of Byzantium [405](#)
- Aristotle [21](#), [177](#), [225](#), [307](#), [383](#), [398](#), [401](#), [405](#),
[419](#), [430](#), [468](#), [501](#), [508](#), [510](#), [528](#), [587](#), [625](#), [663](#);
Ps-Aristotle [332](#)
- Arrian [376](#), [717](#)
- Athenaeus [274](#), [642](#), [674](#), [677](#), [682](#)
- Ausonius [671](#)
- Caesar [423](#)
- Callimachus [397](#)
- Catullus [487](#)
- Cicero [111](#), [521](#)
- Columella [52](#), [93](#), [109](#), [161](#), [242](#), [293](#), [644](#), [666](#), [693](#)
- Curtius Rufus [460](#)
- Ctesias [258](#), [270](#), [446](#), [454](#)
- Dio [226](#), [453](#), [723](#)
- Diodorus Siculus [258](#), [447](#), [543](#), [710](#), [746](#)
- Dionysius [522](#)
- Epicharmus [623](#)
- Eupolis [66](#)
- Festus [141](#)
- Frontinus [260](#)
- Galen [434](#)
- Greek Anthology* [143](#), [195](#), [383](#), [413](#), [563](#), [570](#), [598](#),
[602](#), [680](#), [728](#), [735](#)
- Hanno the Navigator [471](#)
- Horapollo [514](#)
- Herodotus [103](#), [331](#), [396](#), [439](#), [486](#), [551](#), [594](#)
- Hesiod [520](#)
- Historia Augusta* [722](#)
- Homer [89](#), [106](#), [190](#), [235](#), [289](#), [330](#), [247](#), [356](#), [408](#),
[500](#), [501](#), [532](#), [611](#), [632](#)
- Ioannes Diaconus [721](#)
- Joshua the Stylite [228](#)
- Julian [642](#)
- Libanius [729](#)
- Livy [50](#), [51](#), [141](#), [142](#), [251](#), [360](#), [401](#), [481](#), [510](#),
[611](#)
- Longus [71](#), [91](#)
- Lucan [589](#)
- Lucilius [589](#)
- Macrobius [478](#)
- Nicander [17](#), [627](#)
- Oppian [308](#), [409](#), [415](#), [461](#), [668](#)
- Ovid [29](#), [604](#)
- Palladius [371](#)
- Pausanias [331](#), [613](#), [633](#), [642](#)
- Petronius [227](#), [360](#)
- Philostratus [409](#), [670](#)
- Plato Comicus [623](#)
- Pliny [139](#), [193](#), [200](#), [207](#), [267](#), [279](#), [308](#), [320](#), [333](#),
[349](#), [351](#), [369](#), [370](#), [384](#), [441](#), [490](#), [497](#), [536](#), [571](#),
[575](#), [612](#), [619](#), [677](#), [684](#)
- Plutarch [54](#), [162](#), [164](#), [235](#), [306](#), [359](#), [413](#), [431](#), [460](#),
[481](#), [495](#), [510](#), [518](#), [597](#), [632](#), [643](#), [673](#)
- Pollux [266](#)
- Polybius [432](#)
- Procopius [178](#), [420](#)
- Sophocles [489](#)
- Statius [731](#)
- Strabo [175](#), [201](#), [307](#), [377](#), [448](#), [602](#)
- Suetonius [226](#), [279](#), [448](#), [510](#), [511](#)

Index of classical authors

Symmachus [555](#)

Symphosius [564](#), [646](#)

Theophrastus [486](#), [664](#)

Thucydides [196](#)

Varro [69](#), [94](#), [165](#), [249](#), [275](#), [648](#)

Vegetius [144](#)

Virgil [633](#)

Xenophon [137](#), [191](#), [222](#), [375](#), [405](#), [749](#)